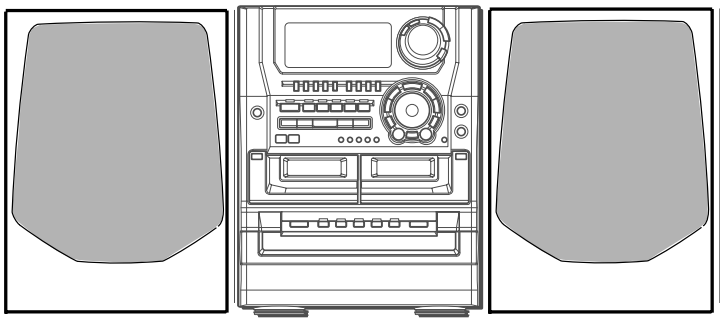
aiwa SERVICE

NSX-T77 LH



SERVICE MANUAL

COMPACT DISC STEREO
CASSETTE RECEIVER

BASIC TAPE MECHANISM: 2ZM-3MK2 PR4NM
BASIC CD MECHANISM: 6ZG-1 ZRNDM

SYSTEM	CD–CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX–T77	CX–NT77	SX–WNT98	RC–ZAS04

- This Service Manual is the “Revision Publishing” and replaces “Simple Manual” NSX-T77 (S/M Code No. 09-99C-425-2T1).
- If requiring information about the CD mechanisim, see Service Manual of 6ZG-1 (S/M Code No. 09-001-338-7N2).

aiwa

S/M Code No. 09-003-425-2R1

REVISION DATA

SPECIFICATIONS

<FM Tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity(IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

<AM Tuner section>

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 uV/m
Antenna	Loop antenna

<Amplifier section>

Mid-high frequency amplifier

Power output*	Rated: 56 W + 56 W (8 ohms, THD 1 %,1 kHz) Reference: 70 W + 70 W (8 ohms, THD 10 %,1 kHz)
Total harmonic distortion	0.3 % (28 W, 1 kHz, 8 ohms, DIN AUDIO)

Low frequency amplifier

Power output*	Rated: 167 W + 167 W (6 ohms, THD 1 %,75 Hz) Reference: 210 W + 210 W (6 ohms, THD 10 %,75 Hz)
Total harmonic distortion	0.3 % (84 W,75 Hz,6 ohms, DIN AUDIO) * without connecting to surround speakers
Inputs	VIDEO/AUX : 300 mV (adjustable) MD : 300 mV (adjustable) MIC1,MIC2 : 1.0 mV (10 kohms) LINE OUT : 150 mV
Outputs	SPEAKERS HIGH FREQ : accept speakers of 8 ohms or more SPEAKERS LOW FREQ : accept speakers of 6 ohms or more SURROUND SPEAKERS : accept speakers of 8 to 16 ohms PHONES (stereo jack) : accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	CrO2 tape: 50 Hz – 16000 Hz Normal tape: 50 Hz – 15000 Hz
Signal to noise ratio	60dB (Dolby B NR ON, CrO2 tape peak level)
Recording system	AC bias
Heads	Deck 1: Playback head x 1 Deck 2: Recording/Playback head x 1, erase head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	83 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<Speaker system SX–WNT98>

Cabinet type	4 way, built-in subwoofer
Speakers	Subwoofer : 200 mm ($7^{7}/_{8}$ in.) cone type Mid range: 100 mm ($3^{15}/_{16}$ in.) cone type Tweeter : 60 mm ($2^{3}/_{8}$ in.) cone type Super Tweeter : 20 mm ($^{13}/_{16}$ in.) ceramic type
Impedance	6 ohms / 8 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	260 x 463 x 314 mm ($10^{1}/_{4}$ x $18^{1}/_{4}$ x $12^{3}/_{8}$ in.)
Weight	8.0 kg (17 lbs. 10 oz)

<General>

Power requirements	120 V/220-230 V/240 V (switchable) 50/60Hz
Power consumption	275W
Dimensions of main unit	300 x 382.6 x 396.4mm ($11^{7}/_{8}$ x $15^{1}/_{8}$ x 15 $^{5}/_{8}$in.)
Weight of main unit	13.7 kg (30 lbs. 3 oz)

Standby power consumption

If the power-economizing mode is OFF: 36 W
If the power-economizing mode is ON: 0.9 W

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY" and the double-D symbol ⧉ are trademarks of Dolby Laboratories Licensing Corporation.
- The word "BBE"and the "BBE symbol" are trademarks of BBE Sound, Inc.
  Under license from BBE Sound,Inc.

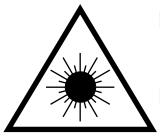
ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NF4-902-010		IB,LH (ESP) M
2	87-006-225-010		AM LOOP ANT NC2
3	87-043-115-010		ANT,FEEDER FM
⚠ 4	87-A91-017-010		PLUG,CONVERSION JT-0476
5	8Z-NF5-702-010		RC UNIT,RC-ZAS04

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

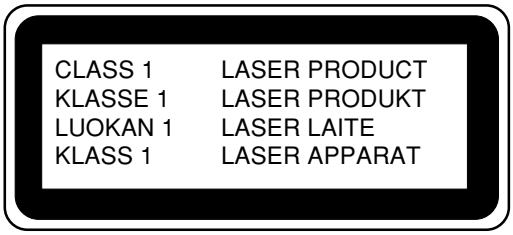
VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

ATTENTION
L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL
Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



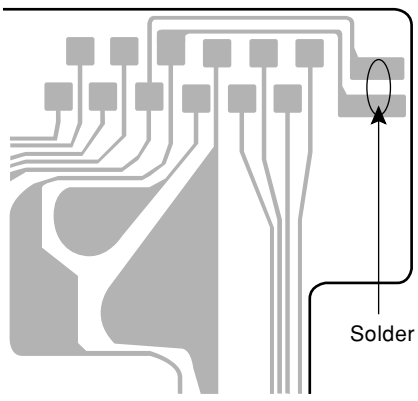
Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.

PICK-UP Assy P.C.B



NOTE ON BEFORE STARTING REPAIR

1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.

In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

① Remove the AC power cord.
② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
④ Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
⑤ Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.

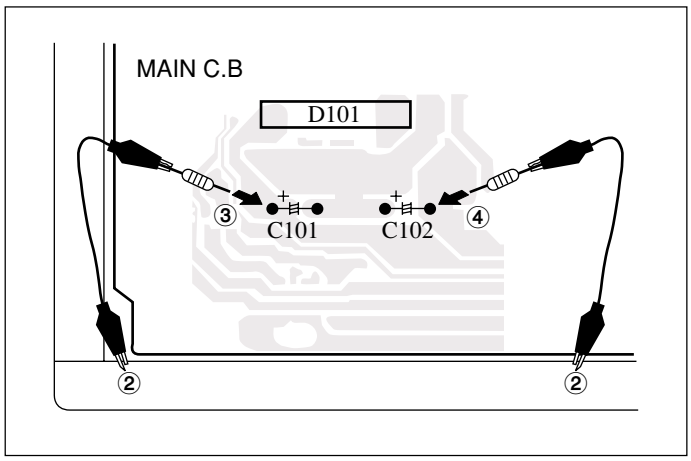


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is "H", the MICROCOMPUTER is judged to be operating correctly. When this terminal is "L", the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.

When the MICROCOMPUTER is not defective, the HOLD terminal can also go "L" when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to "L".

- Good or no good judgement of the MICROCOMPUTER

① Turn on the AC main power.
② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the "H" level or not.
③ When the HOLD terminal is "L" level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

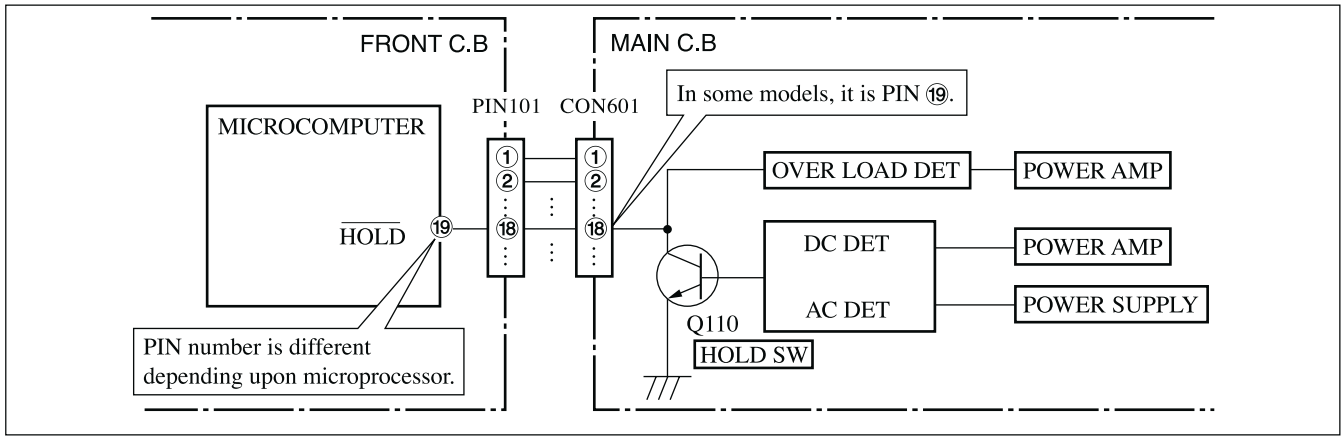


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.
When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

① Remove the AC power cord.

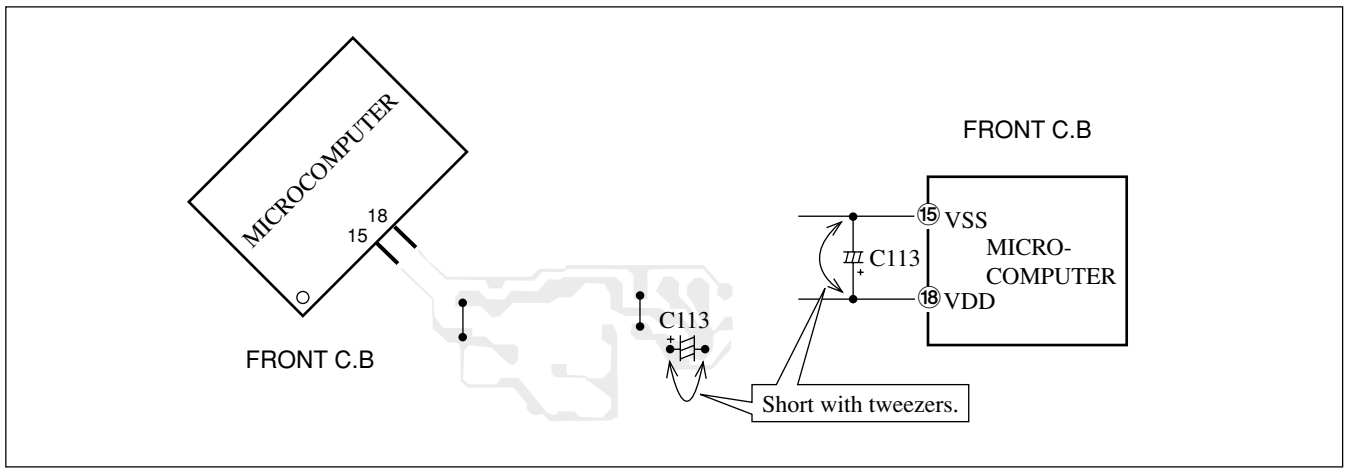


Fig-2-2

② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

ELETRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8A-NF3-635-010		C-IC,LC876596W-5P43
	87-A21-482-010		IC,RPM6938-H4
	87-A20-869-040		C-IC,M62449FP
	87-A21-398-010		IC,STK490-010
	87-A20-355-010		IC,CXA1553P
	87-A20-783-040		C-IC,BA7762AFS
	87-A21-577-040		C-IC,M61506FP
	87-070-289-040		IC,BU 2092F
	87-A21-021-040		C-IC,BU2099FV
	87-A21-018-040		C-IC,M65849BFP631D
	87-A21-452-040		C-IC,BD3876KS2
	87-A21-051-040		C-IC,BU9990-03FS
	87-A21-415-010		IC,LA1843
	87-070-127-110		IC,LC72131D
TRANSISTOR			
	87-A30-217-010		TR,2SB1436(R)
	87-026-245-080		TR,DTC114ES
	87-A30-198-080		TR,KTC3199GR
	89-213-702-010		TR,2SB1370 (1.8W)
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F
	87-A30-318-080		TR,CSA952K
	87-A30-218-080		TR,2SB1237(Q)
	87-A30-087-080		C-FET,2SK2158
	87-A30-269-040		C-FET,2SJ461-T1
	87-A30-073-080		C-TR,RT1N 141C
	87-A30-074-080		C-TR,RT1P 141C
	87-A30-190-080		TR,CC5551
	87-A30-097-010		TR,FN 1016
	87-A30-098-010		TR,FP 1016
	87-A30-106-040		C-TR,CMBT5551
	87-A30-276-040		C-TR,DTA143EKA
	87-A30-063-080		C-TR,KRA104S
	87-026-609-080		TR,KTA1266GR
	87-A30-107-070		C-TR,CMBT5401
	87-A30-186-010		FET,2SK3053
	87-A30-086-070		C-TR,CSD1306E
	87-A30-329-080		TR,CD1585BC
	89-327-143-080		TR,2SC2714 (0.1W)
	87-A30-072-080		C-TR,RT1P 144C
	87-A30-234-080		TR,CSC4115BC
DIODE			
	87-A40-673-090		DIODE,D10XB20
	87-A40-553-080		DIODE,1N4003 LES
	87-A40-784-080		ZENER,UZ39BSB
	87-A40-736-080		DIODE,1N4148M(SEM)
	87-A40-764-080		ZENER,UZ10BSC
	87-070-274-080		DIODE,1N4003 SEM
	87-A40-313-080		C-DIODE,MC 2840
	87-A40-270-080		C-DIODE,MC2838
	87-A40-269-080		C-DIODE,MC2836
	87-A40-768-080		ZENER,UZ16BSA
	87-017-154-080		ZENER,HZS6C3L
	87-020-331-080		CHIP-DIODE,DAN202K
	87-A40-488-080		DIODE,1SS244
	87-A40-747-080		ZENER,UZ5.1BSB
	87-A40-751-080		ZENER,UZ6.2BSB
	87-A40-646-010		DIODE,FMB-G16L
	87-A40-745-080		ZENER,UZ4.7BSA
	87-A40-749-080		ZENER,UZ5.6BSB
	87-017-149-080		ZENER,HZS6A2L
MAIN C.B			

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C3	87-012-368-080		C-CAP,S 0.1-50 F
C4	87-012-368-080		C-CAP,S 0.1-50 F
C21	87-016-035-090		CAP, E 6800-35 VR
C22	87-016-035-090		CAP, E 6800-35 VR
C25	87-010-392-080		CAP ELECT 33SME-35V
C26	87-010-258-080		CAP,E 22-35 SME
C27	87-010-392-080		CAP ELECT 33SME-35V
C28	87-010-258-080		CAP,E 22-35 SME
C31	87-010-263-080		CAP, ELECT 100-10V
C32	87-010-197-080		CAP, CHIP 0.01 DM
C34	87-010-247-080		CAP, ELECT 100-50V
C35	87-010-380-080		CAP, ELECT 47-16V
C36	87-010-381-080		CAP, ELECT 330-16V
C38	87-010-384-080		CAP, ELECT 100-25V
C39	87-010-384-080		CAP, ELECT 100-25V
C40	87-010-197-080		CAP, CHIP 0.01 DM
C60	87-010-403-080		CAP, ELECT 3.3-50V
C80	87-010-401-080		CAP, ELECT 1-50V
C81	87-010-374-080		CAP, ELECT 47-10V
C82	87-010-260-080		CAP, ELECT 47-25V
C104	87-010-196-080		CHIP CAPACITOR,0.1-25
C105	87-010-196-080		CHIP CAPACITOR,0.1-25
C111	87-010-401-080		CAP, ELECT 1-50V
C112	87-010-401-080		CAP, ELECT 1-50V
C115	87-010-401-080		CAP, ELECT 1-50V
C116	87-010-401-080		CAP, ELECT 1-50V
C121	87-010-406-080		CAP, ELECT 22-50
C122	87-010-406-080		CAP, ELECT 22-50
C163	87-010-196-080		CHIP CAPACITOR,0.1-25
C171	87-012-368-080		C-CAP,S 0.1-50 F
C172	87-012-368-080		C-CAP,S 0.1-50 F
C173	87-012-368-080		C-CAP,S 0.1-50 F
C174	87-012-368-080		C-CAP,S 0.1-50 F
C175	87-A11-572-080		C-CAP,S 0.015-50 K B
C176	87-A11-572-080		C-CAP,S 0.015-50 K B
C177	87-010-197-080		CAP, CHIP 0.01 DM
C178	87-010-197-080		CAP, CHIP 0.01 DM
C301	87-010-318-080		C-CAP,S 47P-50 CH
C302	87-010-318-080		C-CAP,S 47P-50 CH
C303	87-012-157-080		C-CAP,S 330P-50 CH
C304	87-012-157-080		C-CAP,S 330P-50 CH
C305	87-012-157-080		C-CAP,S 330P-50 CH
C306	87-012-157-080		C-CAP,S 330P-50 CH
C307	87-010-196-080		CHIP CAPACITOR,0.1-25
C311	87-010-198-080		CAP, CHIP 0.022
C312	87-010-198-080		CAP, CHIP 0.022
C313	87-010-180-080		C-CER 1500P
C314	87-010-180-080		C-CER 1500P
C315	87-010-178-080		CHIP CAP 1000P
C316	87-010-178-080		CHIP CAP 1000P
C317	87-A10-201-080		C-CAP,S0.33-16 KB
C318	87-A10-201-080		C-CAP,S0.33-16 KB
C319	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C320	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C321	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C322	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C324	87-010-260-080		CAP, ELECT 47-25V
C325	87-010-370-080		CAP,E 330-6.3 SME
C327	87-010-404-080		CAP, ELECT 4.7-50V
C328	87-010-404-080		CAP, ELECT 4.7-50V
C332	87-010-196-080		CHIP CAPACITOR,0.1-25
C335	87-010-401-080		CAP, ELECT 1-50V
C336	87-010-401-080		CAP, ELECT 1-50V
C337	87-010-196-080		CHIP CAPACITOR,0.1-25
C339	87-010-196-080		CHIP CAPACITOR,0.1-25
C340	87-010-196-080		CHIP CAPACITOR,0.1-25
C351	87-012-140-080		CAP 470P
C352	87-012-140-080		CAP 470P
C354	87-010-175-080		CAP 560P
C355	87-012-349-080		C-CAP,S 1000P-50 CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C356	87-010-260-080		CAP, ELECT 47-25V
C357	87-010-197-080		CAP, CHIP 0.01 DM
C358	87-010-183-080		C-CAP,S 2700P-50 B
C359	87-010-183-080		C-CAP,S 2700P-50 B
C360	87-010-183-080		C-CAP,S 2700P-50 B
C370	87-010-196-080		CHIP CAPACITOR,0.1-25
C371	87-010-175-080		C-CAP,S 560P-50 SL
C372	87-010-175-080		C-CAP,S 560P-50 SL
C373	87-010-179-080		CAP,CHIP S B1200P
C374	87-010-179-080		CAP,CHIP S B1200P
C375	87-010-545-080		CAP, ELECT 0.22-50V
C376	87-010-545-080		CAP, ELECT 0.22-50V
C378	87-010-196-080		CHIP CAPACITOR,0.1-25
C381	87-010-197-080		CAP, CHIP 0.01 DM
C382	87-010-318-080		C-CAP,S 47P-50 CH
C383	87-010-197-080		CAP, CHIP 0.01 DM
C384	87-010-402-080		CAP, ELECT 2.2-50V
C385	87-010-184-080		CHIP CAPACITOR 3300P(K)
C386	87-010-196-080		CHIP CAPACITOR,0.1-25
C388	87-012-156-080		C-CAP,S 220P-50 CH
C501	87-010-263-080		CAP, ELECT 100-10V
C502	87-010-196-080		CHIP CAPACITOR,0.1-25
C503	87-016-460-080		C-CAP,S 0.22-16 K B
C504	87-016-460-080		C-CAP,S 0.22-16 K B
C505	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C506	87-010-184-080		CHIP CAPACITOR 3300P(K)
C507	87-A11-550-080		C-CAP,S 820P-50 K B
C508	87-016-669-080		C-CAP,S 0.1-25 K B
C509	87-016-669-080		C-CAP,S 0.1-25 K B
C510	87-010-184-080		CHIP CAPACITOR 3300P(K)
C511	87-A11-550-080		C-CAP,S 820P-50 K B
C512	87-016-460-080		C-CAP,S 0.22-16 K B
C513	87-010-544-080		CAP, ELECT 0.1-50V
C514	87-010-374-080		CAP, ELECT 47-10V
C515	87-010-401-080		CAP, ELECT 1-50V
C516	87-010-401-080		CAP, ELECT 1-50V
C517	87-010-183-080		C-CAP,S 2700P-50 B
C518	87-010-183-080		C-CAP,S 2700P-50 B
C531	87-010-560-080		CAP,E 10-50 GAS
C532	87-010-196-080		CHIP CAPACITOR,0.1-25
C533	87-010-196-080		CHIP CAPACITOR,0.1-25
C534	87-012-156-080		C-CAP,S 220P-50 CH
C535	87-010-178-080		CHIP CAP 1000P
C536	87-010-196-080		CHIP CAPACITOR,0.1-25
C538	87-010-318-080		C-CAP,S 47P-50 CH
C541	87-010-178-080		CHIP CAP 1000P
C603	87-010-318-080		C-CAP,S 47P-50 CH
C604	87-010-318-080		C-CAP,S 47P-50 CH
C605	87-010-318-080		C-CAP,S 47P-50 CH
C606	87-010-318-080		C-CAP,S 47P-50 CH
C611	87-010-956-080		CHIP-CAP,S 0.068-25B
C612	87-010-369-080		C-CAP,S 0.033-25 K B
C613	87-010-197-080		CAP, CHIP 0.01 DM
C614	87-016-669-080		C-CAP,S 0.1-25 K B
C616	87-010-180-080		C-CER 1500P
C617	87-010-198-080		CAP, CHIP 0.022
C618	87-010-401-080		CAP, ELECT 1-50V
C619	87-010-263-080		CAP, ELECT 100-10V
C620	87-016-669-080		C-CAP,S 0.1-25 K B
C621	87-010-197-080		CAP, CHIP 0.01 DM
C623	87-010-401-080		CAP, ELECT 1-50V
C624	87-010-401-080		CAP, ELECT 1-50V
C626	87-010-992-080		C-CAP,S 0.047-16 K B
C627	87-010-400-080		CAP, ELECT 0.47-50V
C628	87-010-400-080		CAP, ELECT 0.47-50V
C629	87-010-992-080		C-CAP,S 0.047-16 K B
C630	87-010-383-080		CAP, ELECT 100-10V
C631	87-010-185-080		C-CAP,S 3900P-50 B
C632	87-010-185-080		C-CAP,S 3900P-50 B
C634	87-010-196-080		CHIP CAPACITOR,0.1-25
C635	87-A10-307-080		C-CAP,S 0.1-25 K B
C636	87-A10-307-080		C-CAP,S 0.1-25 K B
C637	87-A10-307-080		C-CAP,S 0.1-25 K B
C638	87-A10-307-080		C-CAP,S 0.1-25 K B
C639	87-010-405-080		CAP, ELECT 10-50V
C641	87-010-401-080		CAP, ELECT 1-50V
C642	87-010-401-080		CAP, ELECT 1-50V
C643	87-010-196-080		CHIP CAPACITOR,0.1-25
C644	87-010-401-080		CAP, ELECT 1-50V
C671	87-010-322-080		C-CAP,S 100P-50 CH
C672	87-010-322-080		C-CAP,S 100P-50 CH
C673	87-010-197-080		CAP, CHIP 0.01 DM
C679	87-010-196-080		CHIP CAPACITOR,0.1-25
C680	87-010-197-080		CAP, CHIP 0.01 DM
C682	87-010-196-080		CHIP CAPACITOR,0.1-25
C771	87-010-263-080		CAP, ELECT 100-10V
C772	87-010-197-080		CAP, CHIP 0.01 DM
C773	87-010-184-080		CHIP CAPACITOR 3300P(K)
C774	87-010-184-080		CHIP CAPACITOR 3300P(K)
C779	87-A10-679-080		C-CAP,S 3300P-50 TR
C780	87-A10-679-080		C-CAP,S 3300P-50 TR
C782	87-010-197-080		CAP, CHIP 0.01 DM
C783	87-010-197-080		CAP, CHIP 0.01 DM
C784	87-010-197-080		CAP, CHIP 0.01 DM
C785	87-010-197-080		CAP, CHIP 0.01 DM
C786	87-010-197-080		CAP, CHIP 0.01 DM
C788	87-010-149-080		C-CAP,S 5P-50 CH
C789	87-A10-592-080		C-CAP,S 0.015-50 J
C790	87-A10-592-080		C-CAP,S 0.015-50 J
C791	87-010-196-080		CHIP CAPACITOR,0.1-25
C792	87-010-197-080		CAP, CHIP 0.01 DM
C793	87-010-404-080		CAP, ELECT 4.7-50V
C795	87-010-197-080		CAP, CHIP 0.01 DM
C796	87-010-197-080		CAP, CHIP 0.01 DM
C797	87-010-405-080		CAP, ELECT 10-50V
C798	87-010-197-080		CAP, CHIP 0.01 DM
C799	87-010-407-080		CAP, ELECT 33-50V
C800	87-012-369-080		C-CAP,S 0.047-50F
C801	87-010-403-080		CAP, ELECT 3.3-50V
C802	87-012-369-080		C-CAP,S 0.047-50F
C803	87-010-198-080		CAP, CHIP 0.022
C804	87-010-263-080		CAP, ELECT 100-10V
C807	87-010-400-080		CAP, ELECT 0.47-50V
C808	87-010-401-080		CAP, ELECT 1-50V
C809	87-010-401-080		CAP, ELECT 1-50V
C810	87-010-196-080		CHIP CAPACITOR,0.1-25
C811	87-010-403-080		CAP, ELECT 3.3-50V
C812	87-010-403-080		CAP, ELECT 3.3-50V
C814	87-010-197-080		CAP, CHIP 0.01 DM
C815	87-010-400-080		CAP, ELECT 0.47-50V
C816	87-010-403-080		CAP, ELECT 3.3-50V
C819	87-010-179-080		CAP,CHIP S B1200P
C820	87-010-179-080		CAP,CHIP S B1200P
C821	87-010-405-080		CAP, ELECT 10-50V
C823	87-010-177-080		C-CAP,S 820P-50 SL
C824	87-010-405-080		CAP, ELECT 10-50V
C825	87-010-596-080		CAP, S 0.047-16
C842	87-010-197-080		CAP, CHIP 0.01 DM
C844	87-010-197-080		CAP, CHIP 0.01 DM
C850	87-010-260-080		CAP, ELECT 47-25V
C851	87-010-197-080		CAP, CHIP 0.01 DM
C852	87-010-197-080		CAP, CHIP 0.01 DM
C853	87-010-197-080		CAP, CHIP 0.01 DM
C858	87-010-196-080		CHIP CAPACITOR,0.1-25
C859	87-010-196-080		CHIP CAPACITOR,0.1-25
C860	87-010-197-080		CAP, CHIP 0.01 DM
C959	87-010-196-080		CHIP CAPACITOR,0.1-25
C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C961	87-010-152-080		C-CAP,S 8P-50 CH
C963	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C971	87-010-381-080		CAP, ELECT 330-16V
C972	87-010-404-080		CAP, ELECT 4.7-50V
C973	87-010-197-080		CAP, CHIP 0.01 DM
C974	87-010-197-080		CAP, CHIP 0.01 DM
C979	87-010-322-080		C-CAP,S 100P-50 CH
C981	87-010-260-080		CAP, ELECT 47-25V
C982	87-010-196-080		CHIP CAPACITOR,0.1-25
C983	87-010-197-080		CAP, CHIP 0.01 DM
C984	87-010-197-080		CAP, CHIP 0.01 DM
C987	87-010-197-080		CAP, CHIP 0.01 DM
C991	87-010-312-080		C-CAP,S 15P-50 CH
C992	87-010-312-080		C-CAP,S 15P-50 CH
C993	87-010-178-080		CHIP CAP 1000P
C995	87-010-178-080		CHIP CAP 1000P
C997	87-010-196-080		CHIP CAPACITOR,0.1-25
C998	87-010-260-080		CAP, ELECT 47-25V
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F
CF831	87-008-261-010		FILTER, SFE10.7MA5-A
CF832	87-008-261-010		FILTER, SFE10.7MA5-A
CN1	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3
CN91	87-A60-619-010		CONN,2P V 2MM JMT
CN101	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3
CN301	87-A60-620-010		CONN,3P V 2MM JMT
CN351	87-A60-625-010		CONN,8P V 2MM JMT
CN601	87-099-719-010		CONN,30P TYK-B(X)
CN602	87-A60-131-010		CONN,6P V FE
CN605	87-099-568-010		CONN,11P TUC-P11P-B1
CNA1	8A-NF8-653-010		CONN ASSY,9P TID-A(480)
CNA2	8A-NF3-640-010		CONN ASSY,3P (VM) ANF-3
CNA3	87-049-919-010		CONN,3P V WHT EH
FB501	87-008-372-080		FILTER, EMI BL OIRNI
FC602	88-906-481-110		FF-CABLE,6P 1.25 480MM
FFE831	A8-8ZA-190-030		8ZA-1 FEUNM
J102	87-A60-238-010		TERMINAL,SP 4P (MSC)
J103	87-A60-483-010		JACK,DIA6.3 BLK ST W/S KM
J601	87-A60-885-010		JACK,PIN 6P R/W MSC
J831	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02
L101	87-A50-610-010		COIL,1UHK
L102	87-A50-610-010		COIL,1UHK
L301	87-A50-049-010		COIL,TRAP 85K(COI)
L302	87-A50-049-010		COIL,TRAP 85K(COI)
L351	87-007-342-010		COIL,OSC 85K BIAS
L801	87-A50-266-010		COIL,FM DET-2N(TOK)
L802	87-A91-110-010		FLTR,PCFJZH-450 (TOK)
L811	87-005-847-080		COIL,2.2UH(CECS)
L821	87-A50-209-010		COIL,1POLE MPX(MIT)
L822	87-A50-209-010		COIL,1POLE MPX(MIT)
L832	87-005-847-080		COIL,2.2UH(CECS)
L951	8A-NF8-667-010		COIL,AM PACK 4(TOK)
R161	87-A00-441-050		RES,270-1/2W J RP
R162	87-A00-441-050		RES,270-1/2W J RP
R163	87-A00-441-050		RES,270-1/2W J RP
R164	87-A00-441-050		RES,270-1/2W J RP
R790	87-010-197-080		CAP, CHIP 0.01 DM
R991	87-010-322-080		C-CAP,S 100P-50 CH
R993	87-010-322-080		C-CAP,S 100P-50 CH
R995	87-010-322-080		C-CAP,S 100P-50 CH
SFR301	87-024-355-080		SFR,33K DIA6 H
SFR302	87-024-355-080		SFR,33K DIA6 H
SFR303	87-024-355-080		SFR,33K DIA6 H
SFR304	87-024-355-080		SFR,33K DIA6 H
SFR305	87-024-356-080		SFR,47K DIA6 H
SFR306	87-024-356-080		SFR,47K DIA6 H
SFR351	87-024-356-080		SFR,47K DIA6 H
SFR352	87-024-356-080		SFR,47K DIA6 H
X991	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309

DISPLAY C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C103	87-010-196-080		CHIP CAPACITOR,0.1-25
C104	87-010-313-080		CAP, CHIP 18P
C105	87-010-322-080		C-CAP,S 100P-50 CH
C106	87-012-145-080		CAP, CHIP S 270P CH
C107	87-012-157-080		C-CAP,S 330P-50 CH
C108	87-015-681-040		E/CAP 10-16
C109	87-010-401-040		CAP,E 1-50 SME
C110	87-010-196-080		CHIP CAPACITOR,0.1-25
C112	87-016-460-080		C-CAP,S 0.22-16 K B
C113	87-A10-189-040		CAP,E 220-10
C114	87-010-196-080		CHIP CAPACITOR,0.1-25
C115	87-010-198-080		CAP, CHIP 0.022
C116	87-010-493-040		CAP,E 0.47-50 GAS
C117	87-010-498-040		CAP,E 10-16 GAS
C118	87-010-194-080		CAP, CHIP 0.047
C119	87-A10-797-040		CAP,E 47-35 M 5L SRM
C120	87-015-699-040		CAP,E 10-50 7L
C121	87-015-699-040		CAP,E 10-50 7L
C122	87-010-197-080		CAP, CHIP 0.01 DM
C123	87-010-196-080		CHIP CAPACITOR,0.1-25
C125	87-010-196-080		CHIP CAPACITOR,0.1-25
C128	87-010-178-080		CHIP CAP 1000P
C129	87-010-194-080		CAP, CHIP 0.047
C131	87-A10-189-040		CAP,E 220-10
C132	87-A10-189-040		CAP,E 220-10
C151	87-010-194-080		CAP, CHIP 0.047
C192	87-015-785-080		C-CAP, 0.1-25 Z F C3216
C196	87-010-194-080		CAP, CHIP 0.047
C197	87-010-194-080		CAP, CHIP 0.047
C213	87-A10-189-040		CAP,E 220-10
C301	87-010-318-080		C-CAP,S 47P-50 CH
C303	87-016-460-080		C-CAP,S 0.22-16 K B
C304	87-016-460-080		C-CAP,S 0.22-16 K B
C305	87-010-196-080		CHIP CAPACITOR,0.1-25
C306	87-010-196-080		CHIP CAPACITOR,0.1-25
C310	87-010-067-040		CAP,E 0.1-50 5L
C701	87-010-981-040		CAP,E 22-35 5L SRE
C801	87-012-156-080		C-CAP,S 220P-50 CH
C802	87-010-176-080		C-CAP,S 680P-50 SL
C803	87-010-187-080		CAP CHIP S5600P
C804	87-010-213-080		C-CAP,S 0.015-50 B
C805	87-010-197-080		CAP, CHIP 0.01 DM
C806	87-010-071-040		CAP,E 1-50 M 5L SRE
C807	87-010-197-080		CAP, CHIP 0.01 DM
C809	87-012-155-080		C-CAP 180P-50CH
C810	87-010-264-040		CAP,E 100-10 5L
C811	87-010-244-040		CAP,E 22-16 5L
C812	87-016-044-040		CAP,E 100-16 GAS
C821	87-010-196-080		CHIP CAPACITOR,0.1-25
C833	87-010-322-080		C-CAP,S 100P-50 CH
C901	87-012-157-080		C-CAP,S 330P-50 CH
C902	87-010-176-080		C-CAP,S 680P-50 SL
C903	87-010-176-080		C-CAP,S 680P-50 SL
C904	87-010-176-080		C-CAP,S 680P-50 SL
C905	87-010-176-080		C-CAP,S 680P-50 SL
C906	87-010-176-080		C-CAP,S 680P-50 SL
C907	87-010-176-080		C-CAP,S 680P-50 SL
C908	87-010-176-080		C-CAP,S 680P-50 SL
C909	87-010-176-080		C-CAP,S 680P-50 SL
C910	87-010-176-080		C-CAP,S 680P-50 SL
C911	87-010-176-080		C-CAP,S 680P-50 SL
C912	87-010-176-080		C-CAP,S 680P-50 SL
C913	87-010-176-080		C-CAP,S 680P-50 SL
C914	87-012-145-080		CAP, CHIP S 270P CH
CN101	87-099-720-010		CONN,30P TYK-B(P)
CN102	87-A60-054-010		CONN,14P V 9604S-14C
CN103	87-099-750-010		CONN,15P V 9604SC
CN601	87-A60-062-010		CONN,05P V 9604S-05C
CN701	87-099-750-010		CONN,15P V 9604SC
FC102	88-914-481-110		FF-CABLE,14P 1.25 480MM

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
FC601	88-905-081-110		FF-CABLE,5P 1.25
FC701	88-915-161-110		FF-CABLE,15P 1.25
FL101	8A-NF3-613-010		FL,BJ752GK-ANF3
L101	87-A50-333-010		COIL,OSC 9.43MHZ
L801	87-A50-093-010		COIL,CLOCK 5.76MHZ
L802	87-003-098-080		COIL,2.2UH

CONTROL C.B

C401	87-010-196-080		CHIP CAPACITOR,0.1-25
C407	87-010-322-080		C-CAP,S 100P-50 CH
C410	87-010-196-080		CHIP CAPACITOR,0.1-25
C417	87-010-322-080		C-CAP,S 100P-50 CH
C423	87-010-196-080		CHIP CAPACITOR,0.1-25
C424	87-010-196-080		CHIP CAPACITOR,0.1-25
C501	87-010-178-080		CHIP CAP 1000P
C502	87-012-156-080		C-CAP,S 220P-50 CH
C531	87-010-196-080		CHIP CAPACITOR,0.1-25
C532	87-010-196-080		CHIP CAPACITOR,0.1-25
CN104	87-099-750-010		CONN,15P V 9604SC
CN302	87-A60-059-010		CONN,08P V 9604S-08C
FC104	88-915-161-110		FF-CABLE,15P 1.25
FC302	88-908-381-110		FF-CABLE,8P 1.25
LED101	87-A40-317-080		LED,SLR-342VCT31 RED
LED421	87-A40-843-010		LED,2363-2UBC/F45-27 BLUE
LED422	87-A40-843-010		LED,2363-2UBC/F45-27 BLUE
LED440	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED441	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED442	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED443	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED444	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED445	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED446	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED447	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED448	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED449	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED451	87-A40-537-040		LED,SLR-56PT-T31-W
LED452	87-A40-537-040		LED,SLR-56PT-T31-W
LED453	87-A40-537-040		LED,SLR-56PT-T31-W
LED454	87-A40-537-040		LED,SLR-56PT-T31-W
LED455	87-A40-537-040		LED,SLR-56PT-T31-W
LED456	87-A40-537-040		LED,SLR-56PT-T31-W
LED461	87-A40-317-080		LED,SLR-342VCT31 RED
LED462	87-A40-317-080		LED,SLR-342VCT31 RED
LED463	87-A40-317-080		LED,SLR-342VCT31 RED
LED464	87-A40-317-080		LED,SLR-342VCT31 RED
LED465	87-A40-317-080		LED,SLR-342VCT31 RED
LED521	87-A40-847-010		LED,2363-2UBC/C470 BLUE
LED522	87-A40-847-010		LED,2363-2UBC/C470 BLUE
S201	87-A90-095-080		SW,TACT EVQ11G04M
S202	87-A90-095-080		SW,TACT EVQ11G04M
S203	87-A90-095-080		SW,TACT EVQ11G04M
S204	87-A90-095-080		SW,TACT EVQ11G04M
S205	87-A90-095-080		SW,TACT EVQ11G04M
S206	87-A90-095-080		SW,TACT EVQ11G04M
S207	87-A90-095-080		SW,TACT EVQ11G04M
S208	87-A90-095-080		SW,TACT EVQ11G04M
S211	87-A90-095-080		SW,TACT EVQ11G04M
S212	87-A90-095-080		SW,TACT EVQ11G04M
S213	87-A90-095-080		SW,TACT EVQ11G04M
S214	87-A90-095-080		SW,TACT EVQ11G04M
S215	87-A90-095-080		SW,TACT EVQ11G04M
S216	87-A90-095-080		SW,TACT EVQ11G04M
S217	87-A90-095-080		SW,TACT EVQ11G04M
S221	87-A90-095-080		SW,TACT EVQ11G04M
S222	87-A90-095-080		SW,TACT EVQ11G04M
S223	87-A90-095-080		SW,TACT EVQ11G04M
S224	87-A90-095-080		SW,TACT EVQ11G04M
S225	87-A90-095-080		SW,TACT EVQ11G04M
S226	87-A90-095-080		SW,TACT EVQ11G04M
S227	87-A90-095-080		SW,TACT EVQ11G04M
S228	87-A90-095-080		SW,TACT EVQ11G04M
S229	87-A90-095-080		SW,TACT EVQ11G04M
S230	87-A90-095-080		SW,TACT EVQ11G04M
S231	87-A90-095-080		SW,TACT EVQ11G04M
S232	87-A90-095-080		SW,TACT EVQ11G04M
S241	87-A90-095-080		SW,TACT EVQ11G04M
S242	87-A90-095-080		SW,TACT EVQ11G04M
S243	87-A90-095-080		SW,TACT EVQ11G04M
S244	87-A90-095-080		SW,TACT EVQ11G04M
S245	87-A90-095-080		SW,TACT EVQ11G04M
S246	87-A90-095-080		SW,TACT EVQ11G04M
S247	87-A90-095-080		SW,TACT EVQ11G04M
S248	87-A90-095-080		SW,TACT EVQ11G04M
S249	87-A90-095-080		SW,TACT EVQ11G04M
S250	87-A90-095-080		SW,TACT EVQ11G04M
S251	87-A90-095-080		SW,TACT EVQ11G04M
SW501	87-A91-739-010		SW,RTRY EC12E12404-25MM RT

AMP C.B

C101	87-010-188-080		CHIP CAP 6800P
C102	87-010-188-080		CHIP CAP 6800P
C103	87-010-405-080		CAP, ELECT 10-50V
C104	87-010-405-080		CAP, ELECT 10-50V
C107	87-010-404-080		CAP, ELECT 4.7-50V
C108	87-010-404-080		CAP, ELECT 4.7-50V
C111	87-010-322-080		C-CAP,S 100P-50 CH
C112	87-010-322-080		C-CAP,S 100P-50 CH
C113	87-A10-812-080		C-CAP,S 220P-200 J CH
C114	87-A10-812-080		C-CAP,S 220P-200 J CH
C119	87-010-197-080		CAP, CHIP 0.01 DM
C120	87-010-197-080		CAP, CHIP 0.01 DM
C121	87-010-260-080		CAP, ELECT 47-25V
C122	87-010-260-080		CAP, ELECT 47-25V
C173	87-010-186-080		CAP,CHIP 4700P
C174	87-010-186-080		CAP,CHIP 4700P
C201	87-A10-304-080		CAP,M 0.056-50 J
C202	87-A10-304-080		CAP,M 0.056-50 J
C203	87-A10-303-080		CAP,M 0.047-50 J
C204	87-A10-303-080		CAP,M 0.047-50 J
C205	87-010-177-080		C-CAP,S 820P-50 SL
C206	87-010-177-080		C-CAP,S 820P-50 SL
C207	87-010-403-080		CAP, ELECT 3.3-50V
C208	87-010-403-080		CAP, ELECT 3.3-50V
C209	87-010-184-080		CHIP CAPACITOR 3300P(K)
C210	87-010-184-080		CHIP CAPACITOR 3300P(K)
C211	87-010-401-080		CAP, ELECT 1-50 M 11L SME
C212	87-010-401-080		CAP, ELECT 1-50 M 11L SME
C215	87-012-156-080		C-CAP,S 220P-50 CH
C216	87-012-156-080		C-CAP,S 220P-50 CH
C217	87-010-260-080		CAP, ELECT 47-25V
C218	87-010-260-080		CAP, ELECT 47-25V
C221	87-010-405-080		CAP, ELECT 10-50V
C222	87-010-405-080		CAP, ELECT 10-50V
C223	87-010-197-080		CAP, CHIP 0.01 DM
C224	87-010-197-080		CAP, CHIP 0.01 DM
C249	87-012-368-080		C-CAP,S 0.1-50 F
C251	87-010-993-080		C-CAP,S 0.056-25 B
C252	87-010-196-080		CHIP CAPACITOR,0.1-25
C253	87-010-196-080		CHIP CAPACITOR,0.1-25
C254	87-010-993-080		C-CAP,S 0.056-25 B
C255	87-010-190-080		S CHIP F 0.01
C256	87-010-190-080		S CHIP F 0.01
C402	87-010-196-080		CHIP CAPACITOR,0.1-25
C413	87-A10-119-080		CAP,E 10-100 REA
C414	87-A10-119-080		CAP,E 10-100 REA
CNA103	8A-NF8-656-010		CONN ASSY,5P TID-A(400)
CON101	87-A61-011-010		CONN,13P H BLK TAC-L13P-A3

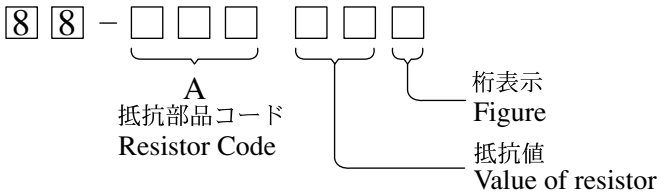
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CON102	87-A61-011-010		CONN,13P H BLK TAC-L13P-A3
J201	87-A61-148-010		JACK,PIN 4P R/W BLUE
L251	87-A50-610-010		COIL,1UH K(MDEC)
L252	87-A50-610-010		COIL,1UH K(MDEC)
R161	87-A00-418-010		RES,M/F 0.15-3W J
R162	87-A00-418-010		RES,M/F 0.15-3W J
R165	87-A00-418-010		RES,M/F 0.15-3W J
R166	87-A00-418-010		RES,M/F 0.15-3W J
R231	87-A00-258-080		RES,M/F 0.22-1W J
R232	87-A00-258-080		RES,M/F 0.22-1W J
R243	87-A00-258-080		RES,M/F 0.22-1W J
R244	87-A00-258-080		RES,M/F 0.22-1W J
TH101	87-A91-042-080		C-THMS,100K 55001
TH102	87-A91-042-080		C-THMS,100K 55001
WH103	87-A90-459-010		HLDR,WIRE 2.5-5P
PT C.B			
C1	87-010-387-080		CAP,E 470-25 SME
C8	87-A11-148-080		CAP,TC U 0.1-50 Z F
C9	87-A11-148-080		CAP,TC U 0.1-50 Z F
C10	87-A11-148-080		CAP,TC U 0.1-50 Z F
C11	87-A11-148-080		CAP,TC U 0.1-50 Z F
C12	87-010-917-000		CAP,E 3300-50 M SMG
C13	87-010-917-000		CAP,E 3300-50 M SMG
C16	87-010-403-040		CAP,E 3.3-50 SME
C18	87-A11-148-080		CAP,TC U 0.1-50 Z F
C19	87-A11-148-080		CAP,TC U 0.1-50 Z F
C20	87-A11-148-080		CAP,TC U 0.1-50 Z F
C21	87-A11-148-080		CAP,TC U 0.1-50 Z F
C22	87-A10-231-090		CAP,E 3300-80
C23	87-A10-231-090		CAP,E 3300-80
C27	87-A11-148-080		CAP,TC U 0.1-50 Z F
C28	87-A11-148-080		CAP,TC U 0.1-50 Z F
C29	87-A11-148-080		CAP,TC U 0.1-50 Z F
C30	87-A11-148-080		CAP,TC U 0.1-50 Z F
C31	87-A11-148-080		CAP,TC U 0.1-50 Z F
C32	87-A11-148-080		CAP,TC U 0.1-50 Z F
C33	87-A11-148-080		CAP,TC U 0.1-50 Z F
C34	87-A11-148-080		CAP,TC U 0.1-50 Z F
C35	87-A11-148-080		CAP,TC U 0.1-50 Z F
C36	87-A11-148-080		CAP,TC U 0.1-50 Z F
C37	87-A11-148-080		CAP,TC U 0.1-50 Z F
C38	87-A11-148-080		CAP,TC U 0.1-50 Z F
CN1	87-A61-110-010		CONN,9P V TID-A
CN2	87-A61-108-010		CONN,5P V TID-A
⚠ FC1	87-033-213-080		FUSE, CLAMP PFC5000
⚠ FC2	87-033-213-080		FUSE, CLAMP PFC5000
⚠ FC3	87-033-213-080		FUSE, CLAMP PFC5000
⚠ FC4	87-033-213-080		FUSE, CLAMP PFC5000
⚠ PT1	8A-NF4-602-010		PT,LH EI96-60 ANF-4
⚠ PT2	8A-NF8-673-010		PT,SUB ANF-8 (H)KAMI
⚠ RY2	87-A91-300-010		RELAY,AC 12V-ALA2PF12
⚠ S1	87-A90-165-010		SW,SL 1-2-3 SWS2301
⚠ T1	87-A60-317-010		TERMINAL, 1P MSC
⚠ T2	87-A60-317-010		TERMINAL, 1P MSC
GEQ C.B			
C201	87-010-402-080		CAP, ELECT 2.2-50V
C202	87-010-402-080		CAP, ELECT 2.2-50V
C205	87-010-404-080		CAP, ELECT 4.7-50V
C207	87-016-669-080		C-CAP,S 0.1-25 K B
C208	87-016-669-080		C-CAP,S 0.1-25 K B
C209	87-016-460-080		C-CAP,S 0.22-16 B
C210	87-016-460-080		C-CAP,S 0.22-16 B
C211	87-012-365-080		C-CAP,S 0.027-25VBK
C212	87-012-365-080		C-CAP,S 0.027-25VBK
C213	87-010-956-080		CHIP-CAP,S 0.068-25B
C214	87-010-956-080		CHIP-CAP,S 0.068-25B
C215	87-010-197-080		CAP, CHIP 0.01 DM
C216	87-010-197-080		CAP, CHIP 0.01 DM
C217	87-010-198-080		CAP, CHIP 0.022
C218	87-010-198-080		CAP, CHIP 0.022
C219	87-010-183-080		C-CAP,S 2700P-50 B
C220	87-010-183-080		C-CAP,S 2700P-50 B
C221	87-010-188-080		CAP,CHIP 6800P
C222	87-010-188-080		CAP,CHIP 6800P
C223	87-010-178-080		CHIP CAP 1000P
C224	87-010-178-080		CHIP CAP 1000P
C225	87-010-182-080		C-CAP,S 2200P-50 B
C226	87-010-182-080		C-CAP,S 2200P-50 B
C227	87-010-112-080		CAP, ELECT 100-16V
C228	87-010-196-080		CHIP CAPACITOR,0.1-25
C229	87-010-322-080		C-CAP,S 100P-50 CH
C230	87-010-322-080		C-CAP,S 100P-50 CH
C231	87-010-322-080		C-CAP,S 100P-50 CH
CN201	87-A60-546-010		CONN,11P H GRY TUC-P11X-C1
VM C.B			
CN301	87-A60-079-010		CONN,08P H 9604S-08F
VOLUME C.B			
S511	87-A90-095-080		SW,TACT EVQ11G04M
S512	87-A90-095-080		SW,TACT EVQ11G04M
S513	87-A90-095-080		SW,TACT EVQ11G04M
S514	87-A90-095-080		SW,TACT EVQ11G04M
S515	87-A90-095-080		SW,TACT EVQ11G04M
SW101	87-A91-740-010		SW,RTRY EC12E24308-30MM
MIC C.B			
C161	87-010-178-080		CHIP CAP 1000P
C162	87-012-156-080		C-CAP,S 220P-50 CH
C601	87-010-196-080		CHIP CAPACITOR,0.1-25
C602	87-010-186-080		CAP,CHIP 4700P
C603	87-010-112-040		CAP,E 100-16
C604	87-010-405-040		CAP,E 10-50
C605	87-010-546-040		CAP,E 0.33-50
C606	87-010-320-080		CHIP CAP 68P
C608	87-012-157-080		C-CAP,S 330P-50 CH
C621	87-010-178-080		CHIP CAP 1000P
CN602	87-A60-082-010		CONN,05P H 9604S-05F
J601	87-A61-242-010		JACK,6.3 BLK MONO W/SW V KM
J602	87-A61-242-010		JACK,6.3 BLK MONO W/SW V KM
L601	87-003-098-080		COIL,2.2UH K LAL02
CD KEY C.B			
LED311	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED312	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED313	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED314	87-A40-380-180		LED,SEL6510C-TP5 GRN
LED315	87-A40-380-180		LED,SEL6510C-TP5 GRN
S311	87-A90-095-080		SW,TACT EVQ11G04M
S312	87-A90-095-080		SW,TACT EVQ11G04M
S313	87-A90-095-080		SW,TACT EVQ11G04M
S314	87-A90-095-080		SW,TACT EVQ11G04M
S315	87-A90-095-080		SW,TACT EVQ11G04M
S316	87-A90-095-080		SW,TACT EVQ11G04M
S317	87-A90-095-080		SW,TACT EVQ11G04M
DECK C.B			
W1	82-ZM3-601-019		RBN,CORD,4P-75
CON105	87-099-756-019		CONN,15P 9604 S F
SFR1	87-024-581-019		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-410		SOL ASSY,27

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
SOL2	82-ZM1-618-410		SOL ASSY,27
SW1	87-A90-248-019		SW,MICRO ESE11SH2CXQ
SW2	87-A90-248-019		SW,MICRO ESE11SH2CXQ
SW3	87-A90-248-019		SW,MICRO ESE11SH2CXQ
SW4	87-036-110-019		SW,MICRO SPPB62
SW5	87-036-110-019		SW,MICRO SPPB62
SW6	87-036-110-019		SW,MICRO SPPB62
SW8	87-A90-248-019		SW,MICRO ESE11SH2CXQ
SW9	87-A90-248-019		SW,MICRO ESE11SH2CXQ

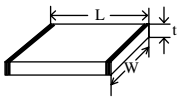
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
HEAD-1 C.B			
	85-ZM3-602-010		PWB,FLEX A
HEAD-2 C.B			
	85-ZM3-602-010		PWB,FLEX A
CON351	87-NF6-616-010		CONN ASSY,8P-RPB

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



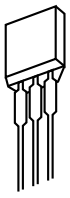
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

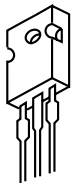
TRANSISTOR ILLUSTRATION

KTA1266GR
KTC3198GR
KTC3199GR
CSA952K

CD1585BC
CSC4115BC

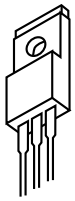


CC5551

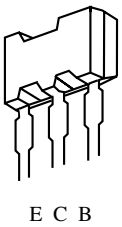


DTC114ES

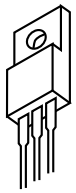
2SB1436



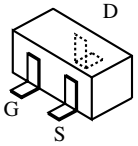
2SB1370
FP1016
FN1016



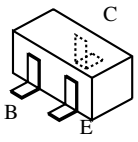
2SB1237Q



2SK3053



2SK2158
2SJ461-T1



2SA1235F
2SC2714O
2SC3052F
CMBT5551
CMBT5401
CSD1306E

DTA143EKA
KRA104S
RT1N141C
RT1P141C
RT1P144C

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

A MAIN C.B

FROM M HEAD-2 C.B
CON351
1 3 5 7 8

FROM L HEAD-1 C.B
CON301
1 2 3

J831
ANTENNA
AM LOOP
FM 75Ω

TO CD MECHANISM 6ZG-1 ZNDM
FC602
CN602

TO E PT C.B CN001
CNA001
WHT
1 3 5 7 9

J601
VIDEO/AUX
R L R L MD R L

LINE OUT
R L

J102
SPEAKERS
LOW FREQ
SPEAKER IMP:6Ω

CN001
1 3 5 7 9 11 13

CON102
1 3 5 7 9 11 13
FROM D AMP C.B

CON101
1 3 5 7 9 11 13
FROM D AMP C.B

CN101
1 2 3
RED
TO G VM C.B
CNA003

CN201
1 3 5 7 9 11
FROM F GEQ C.B

CN091
1 2
RED
BLK
FAN 1

CN092
1 2
RED
BLK
FAN 2

CN601
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
TO B DISPLAY C.B

J103
PHONES

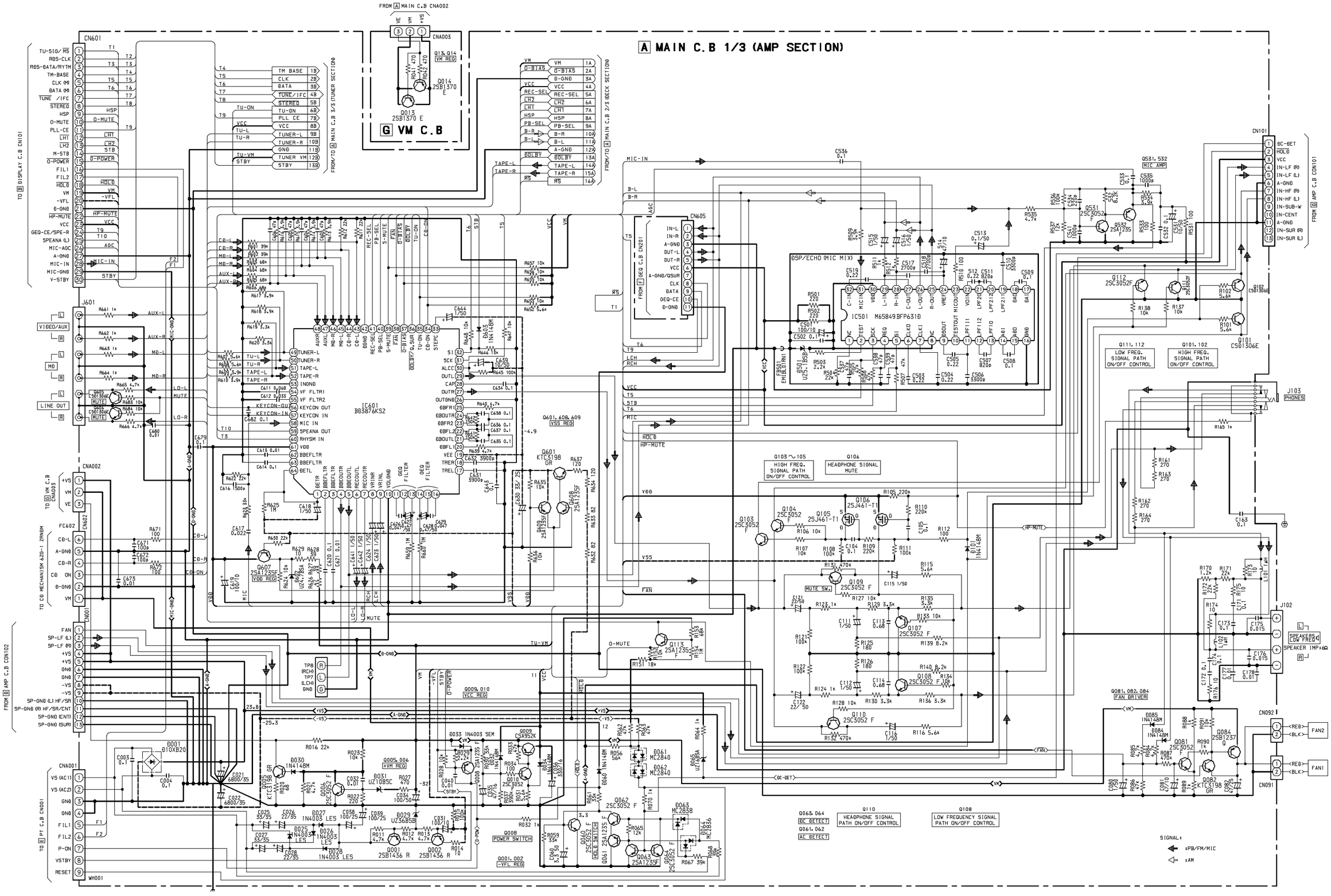
G VM C.B

CNA003
RED
CNA002
FROM A MAIN C.B

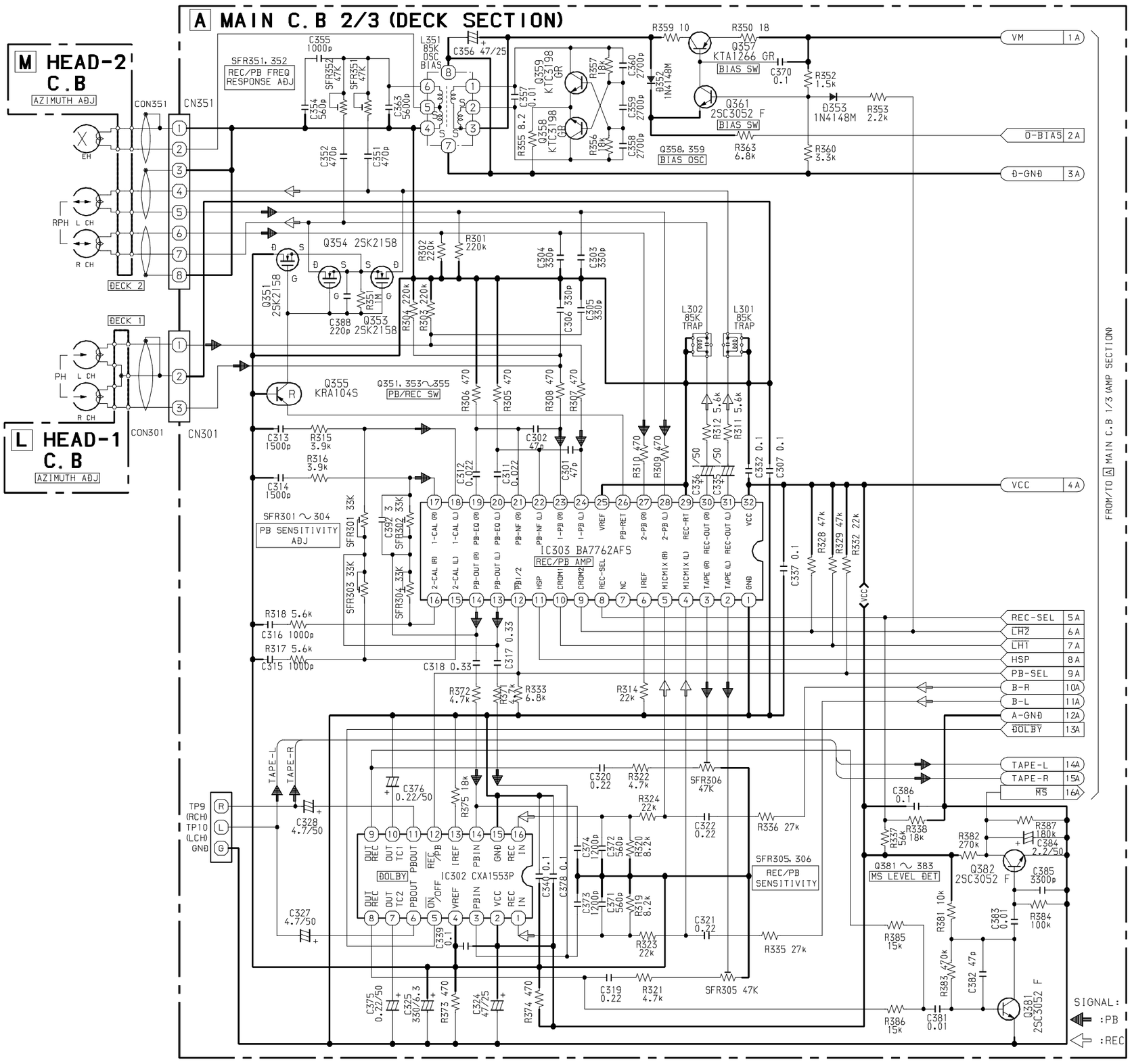
F GEQ C.B

CN605
11 9 7 5 3 1
TO A MAIN C.B

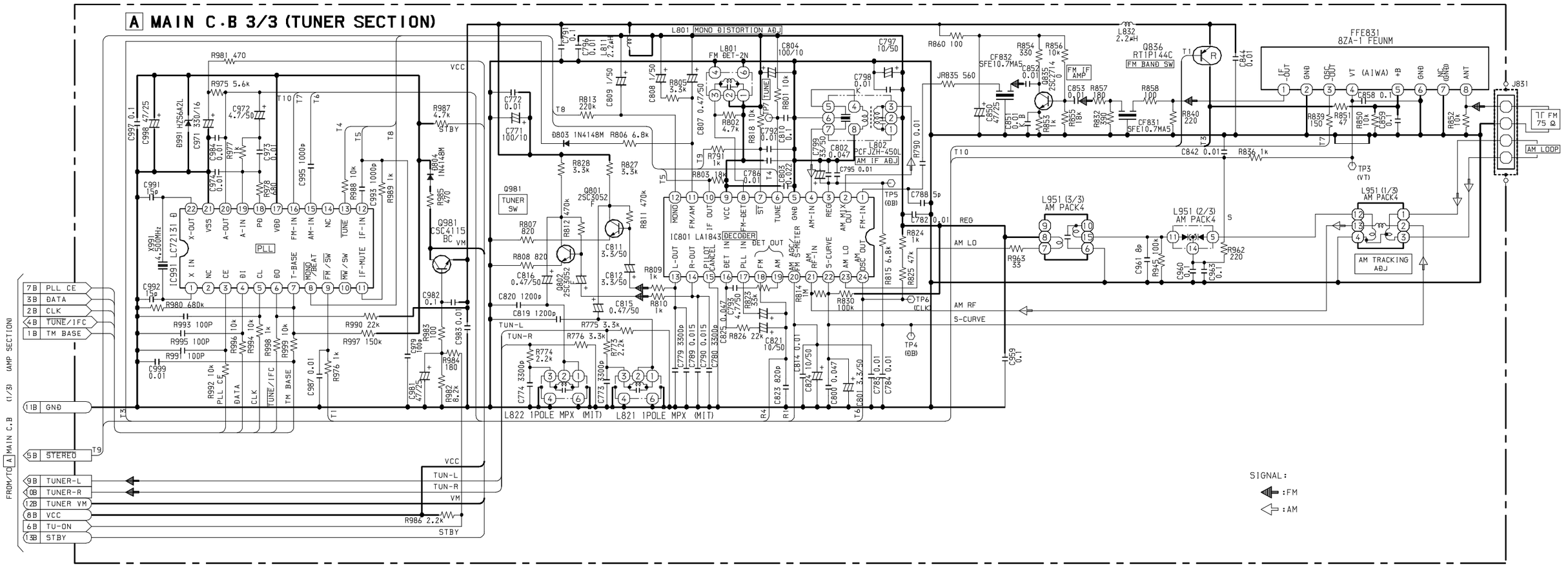
SCHEMATIC DIAGRAM - 1 (MAIN 1 / 3: AMP/ VM)



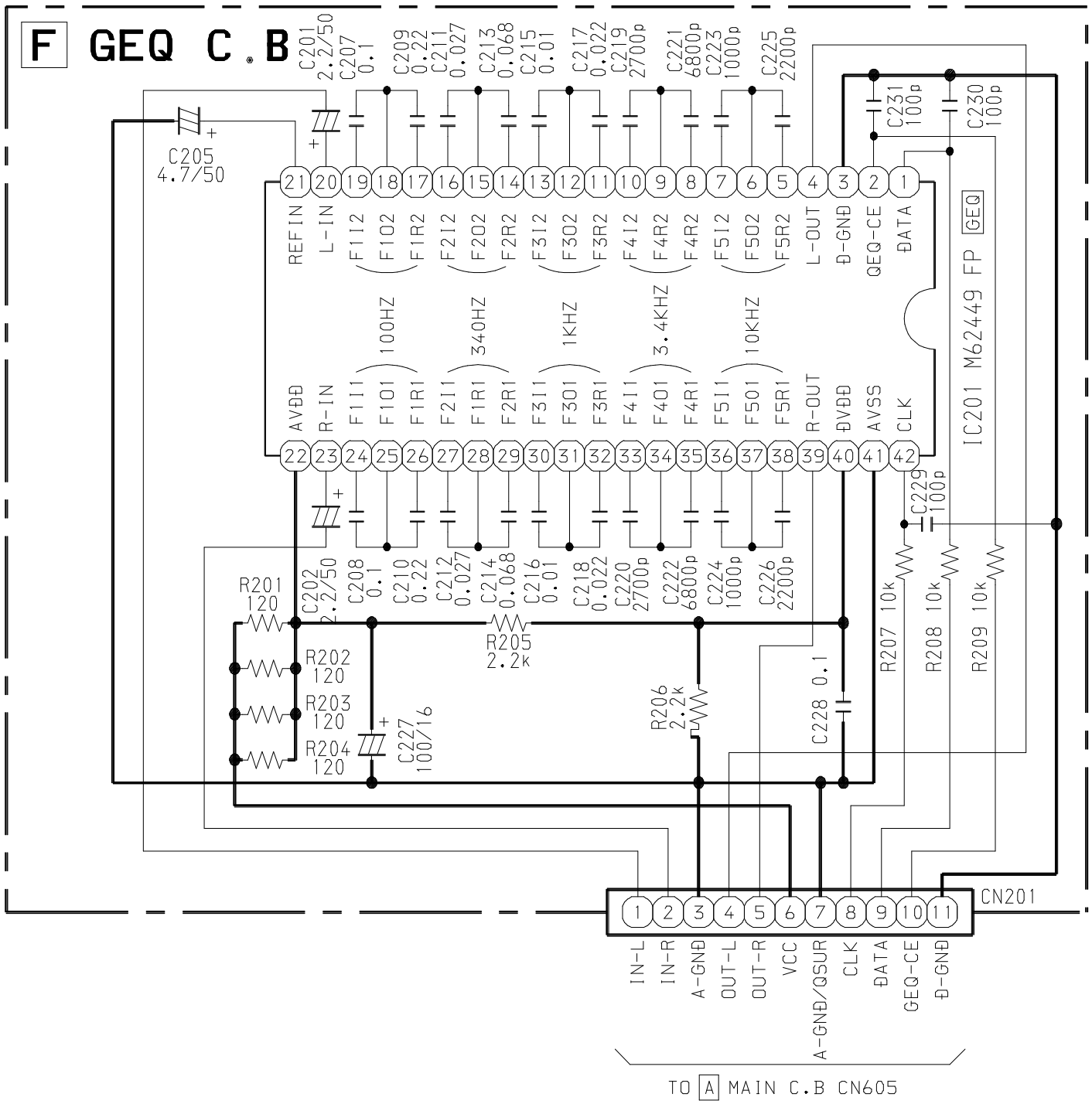
SCHEMATIC DIAGRAM - 2 (MAIN 2 / 3: DECK)

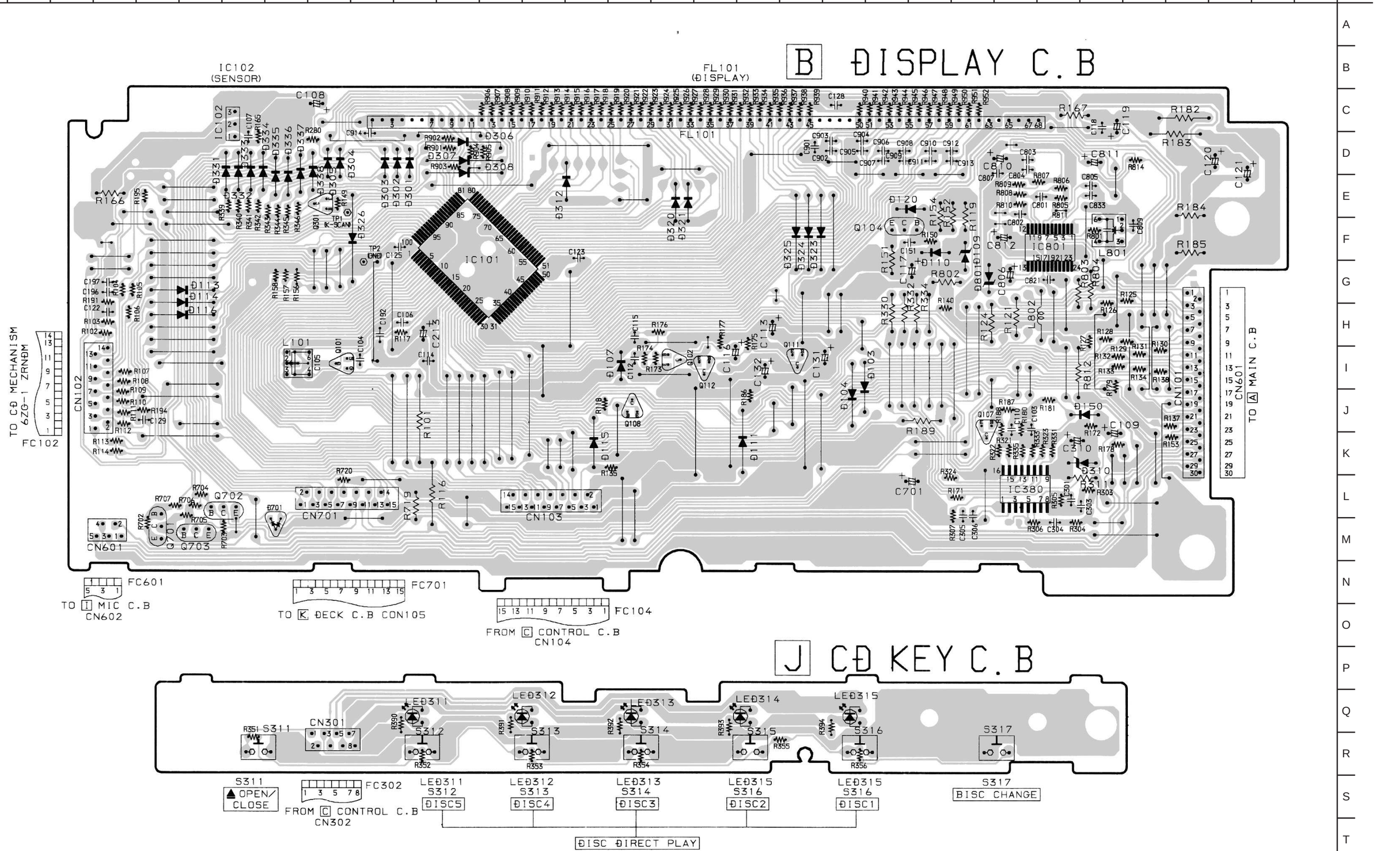


SCHEMATIC DIAGRAM - 3 (MAIN 3 / 3: TUNER)

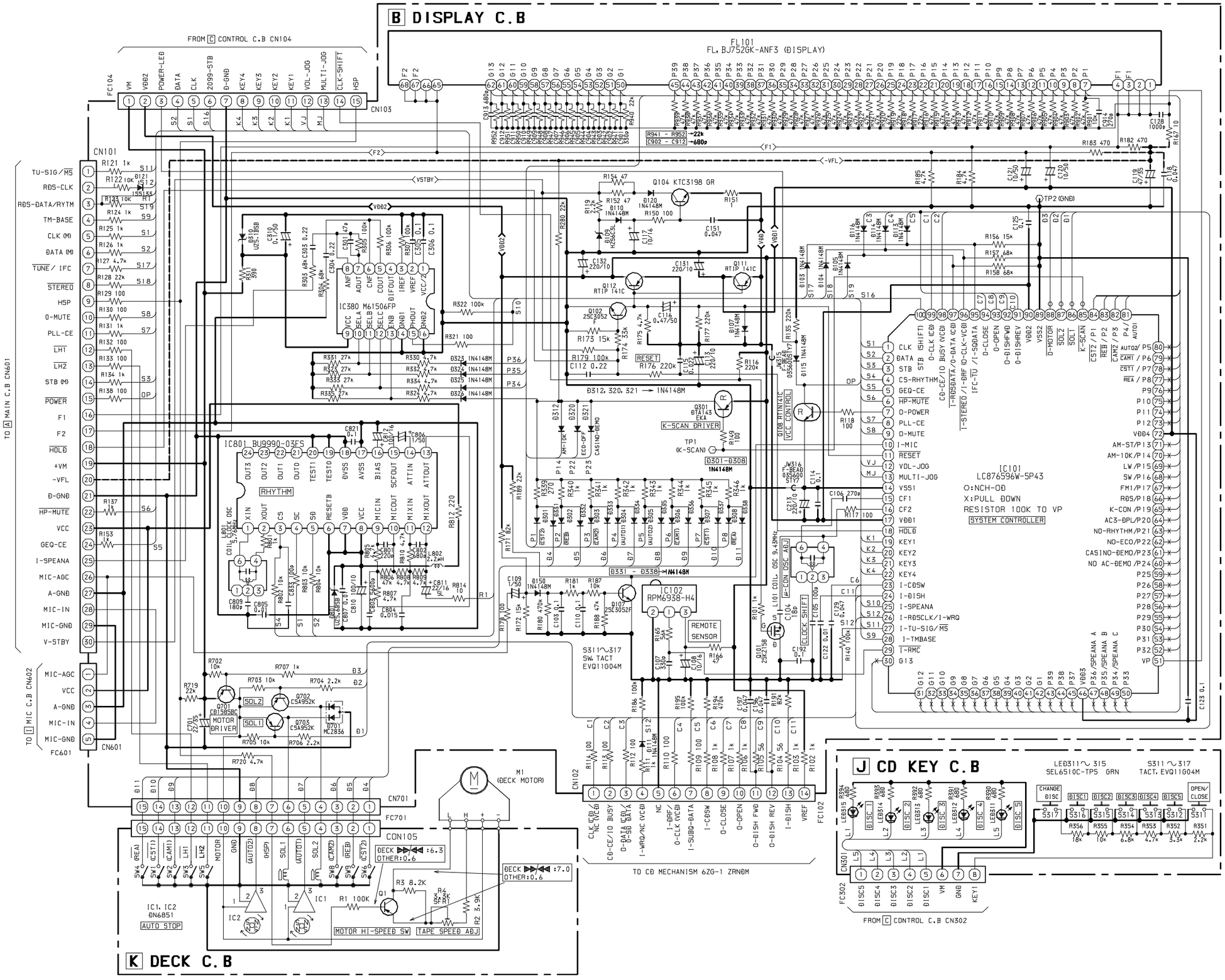


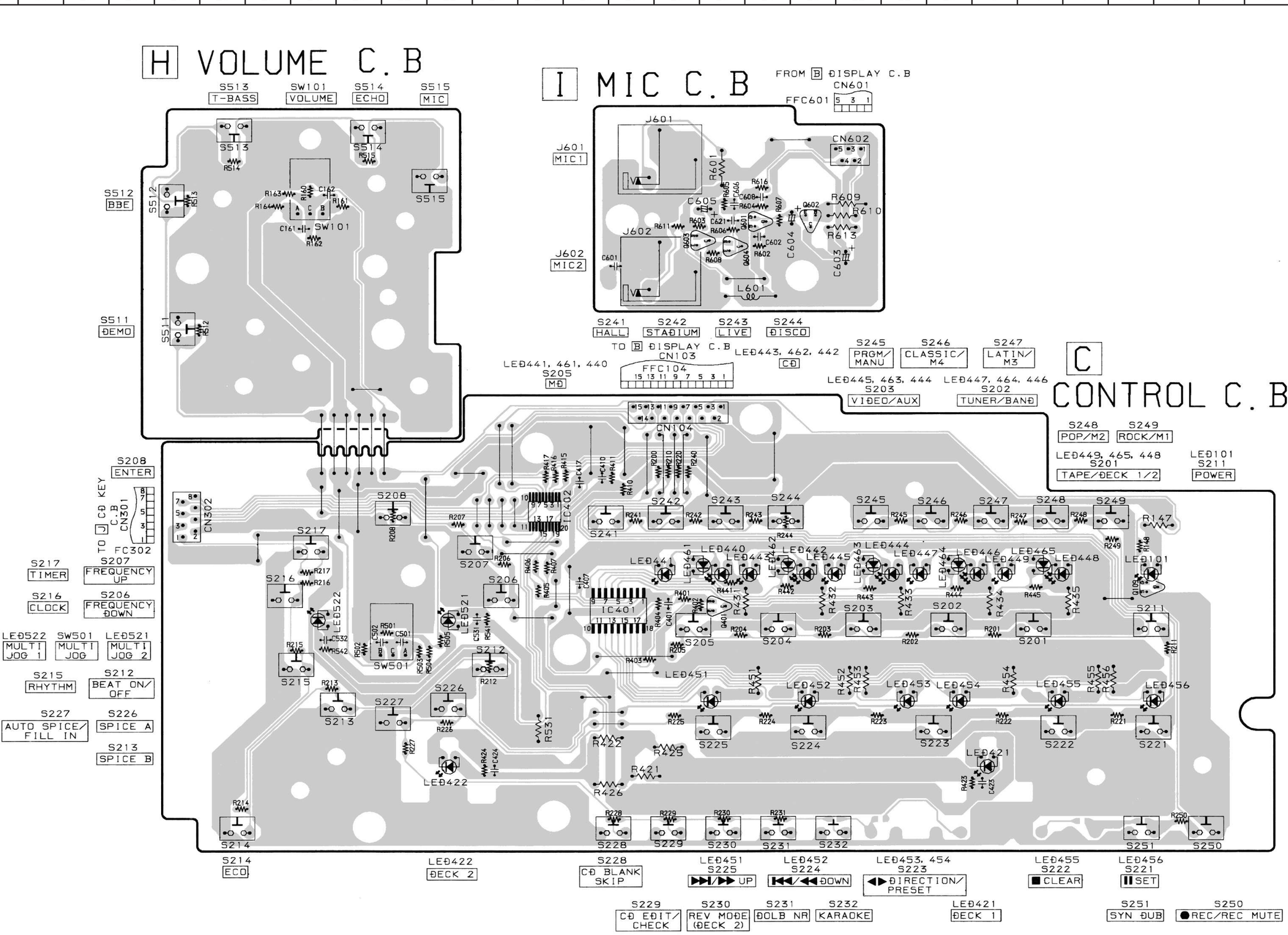
SCHEMATIC DIAGRAM-4 (GEQ)



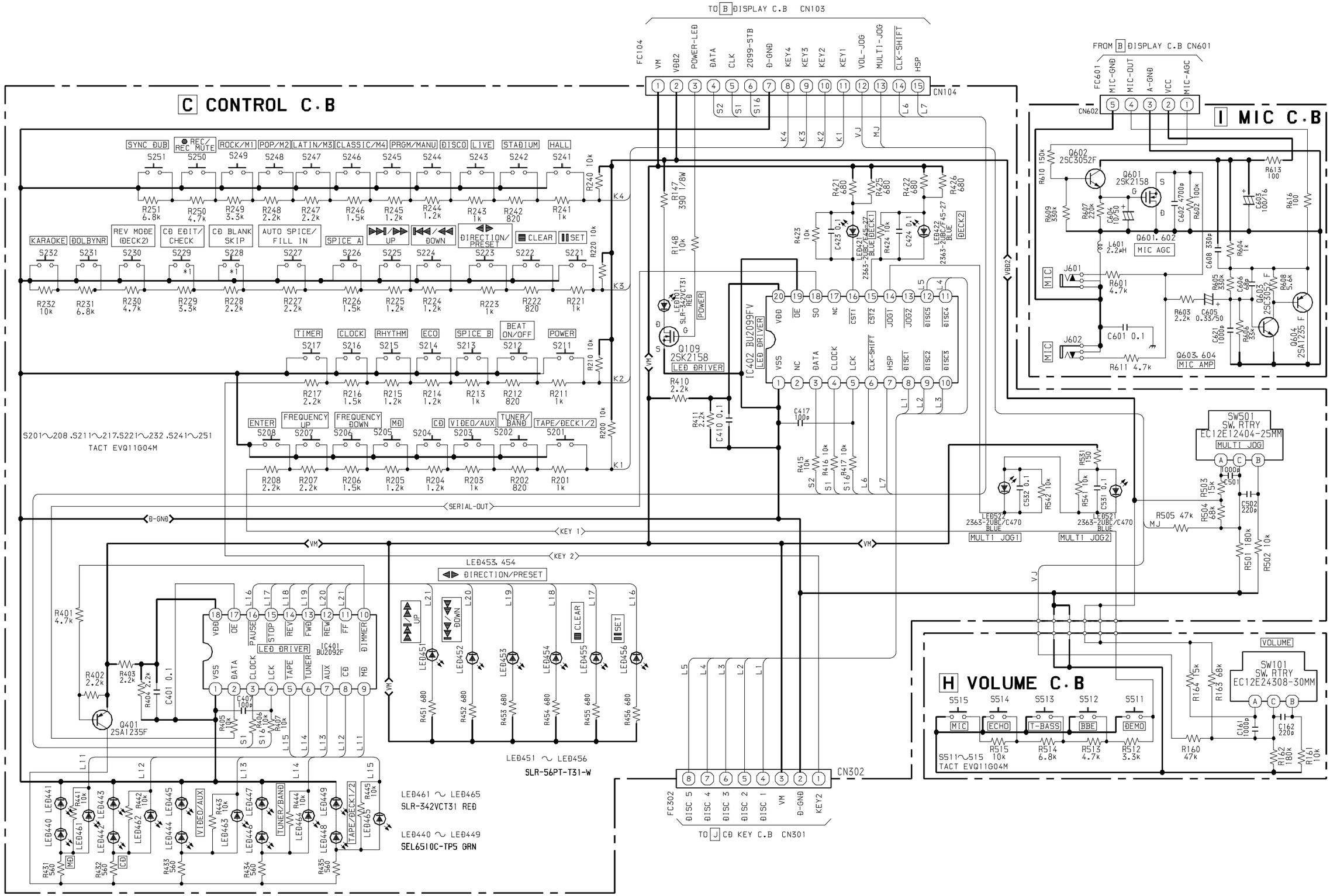

B ĐISPLAY C.B
IC102 (SENSOR)
FL101 (ĐISPLAY)
IC101
IC801
IC380
TO C.Đ MECHANISM 6ZG-1 ZRNĐM
FC102
CN102
TO A MAIN C.B
CN601
CN602
FC601
TO I MIC C.B
CN701
CN103
FC701
TO K ĐECK C.B CON105
FC104
FROM C CONTROL C.B CN104
J CĐ KEY C.B
S311 OPEN/ CLOSE
CN301
FC302
FROM C CONTROL C.B CN302
LEĐ311 S312 ĐISC5
LEĐ312 S313 ĐISC4
LEĐ313 S314 ĐISC3
LEĐ315 S316 ĐISC2
LEĐ315 S316 ĐISC1
S317 BISC CHANGE
ĐISC ĐIRECT PLAY

SCHEMATIC DIAGRAM - 5 (DISPLAY/ CD KEY/ DECK)




H VOLUME C.B
S513 T-BASS
SW101 VOLUME
S514 ECHO
S515 MIC
S512 BBE
S511 ĐEMO
S208 ENTER
TO CĐ KEY C.B CN301 J
FC302
CN302
S217 TIMER
S207 FREQUENCY UP
S216 CLOCK
S206 FREQUENCY ĐOWN
LEĐ522 MULTI JOG 1
SW501 MULTI JOG
LEĐ521 MULTI JOG 2
S215 RHYTHM
S212 BEAT ON/ OFF
S227 AUTO SPICE/ FILL IN
S226 SPICE A
S213 SPICE B
S214 ECO
LEĐ422 ĐECK 2
S228 CĐ BLANK SKIP
LEĐ451 S225 ▶▶/▶▶ UP
LEĐ452 S224 ◀◀/◀◀ ĐOWN
LEĐ453, 454 S223 ◀▶ ĐIRECTION/ PRESET
LEĐ455 S222 ■ CLEAR
LEĐ456 S221 ❚❚ SET
S229 CĐ EĐIT/ CHECK
S230 REV MOĐE (ĐECK 2)
S231 ĐOLB NR
S232 KARAOKE
LEĐ421 ĐECK 1
S251 SYN ĐUB
S250 ● REC/REC MUTE
I MIC C.B
FROM B ĐISPLAY C.B
CN601
FFC601
J601 MIC1
J602 MIC2
CN602
L601
S241 HALL
S242 STAĐIUM
S243 LIVE
S244 ĐISCO
TO B ĐISPLAY C.B
CN103
FFC104
LEĐ441, 461, 440
S205 MĐ
LEĐ443, 462, 442
CĐ
S245 PRGM/ MANU
S246 CLASSIC/ M4
S247 LATIN/ M3
LEĐ445, 463, 444
S203 VIĐEO/AUX
LEĐ447, 464, 446
S202 TUNER/BANĐ
C CONTROL C.B
S248 POP/M2
S249 ROCK/M1
LEĐ449, 465, 448
S201 TAPE/ĐECK 1/2
LEĐ101
S211 POWER
CN104
IC402
IC401
SW501
S241
S242
S243
S244
S245
S246
S247
S248
S249
S207
S206
S205
S204
S203
S202
S201
S211
S217
S216
S215
S214
S213
S212
S227
S226
S225
S224
S223
S222
S221
S228
S229
S230
S231
S232
S251
S250

SCHEMATIC DIAGRAM - 6 (CONTROL/ VOLUME/ MIC)



Đ AMP C.B

TO [E] PT C.B CN002

CNA002

TO [A] MAIN C.B

CN101

CON101

CN102

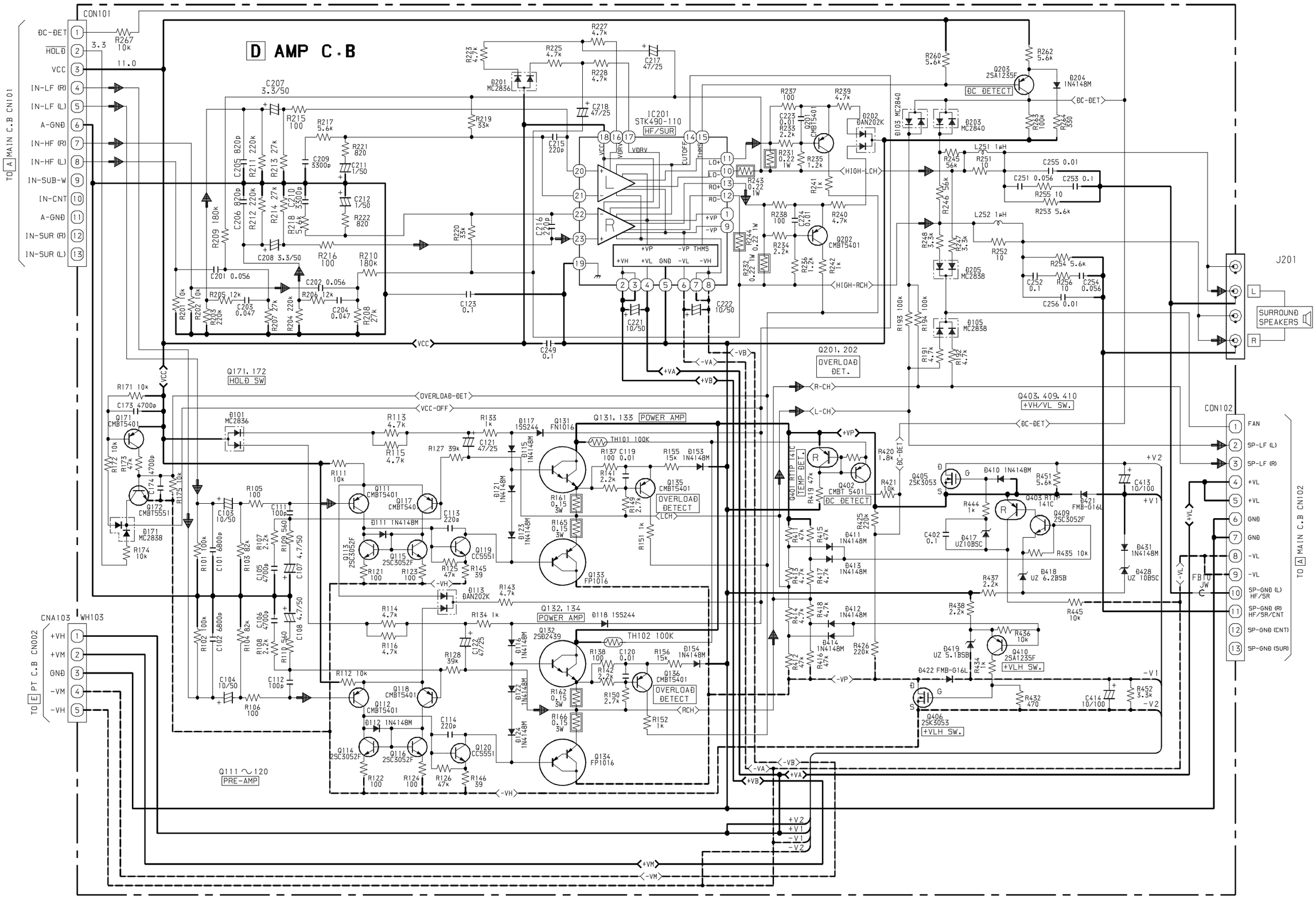
CON102

WH103

J201

SURROUND SPEAKERS

SCHEMATIC DIAGRAM - 7 (AMP)



32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

E PT C.B

FROM A MAIN C.B WH001 CNA001

FROM D AMP C.B WH103 CNA103

AC 120V/220-230V/240V 50/60HZ

T002 T001

RY002

F002 FC003 FC004 F001 FC001 FC002

S001 AC VOLTAGE AC 120V 220~230V 240V

PT001 PT002

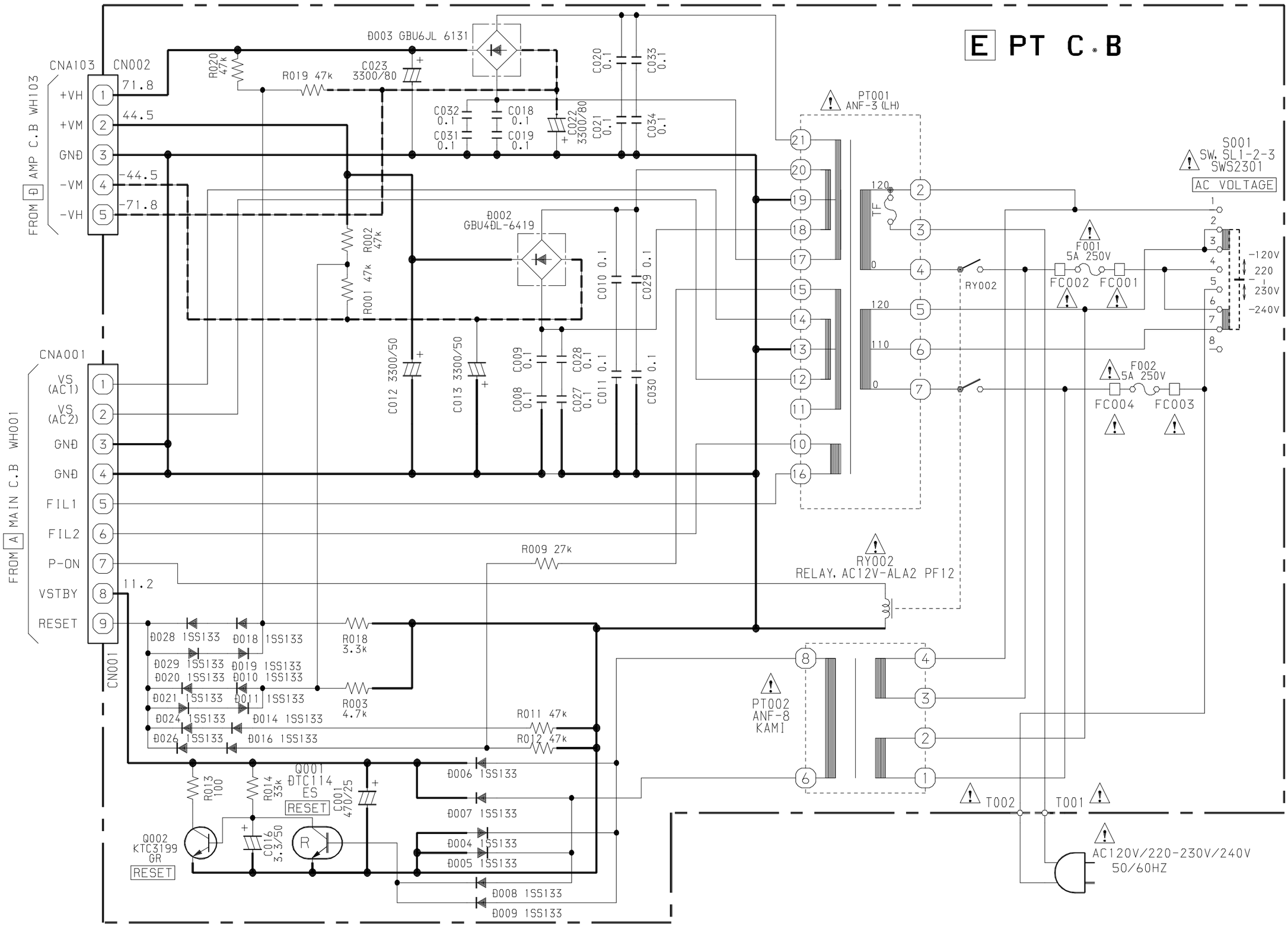
CN001 CN002

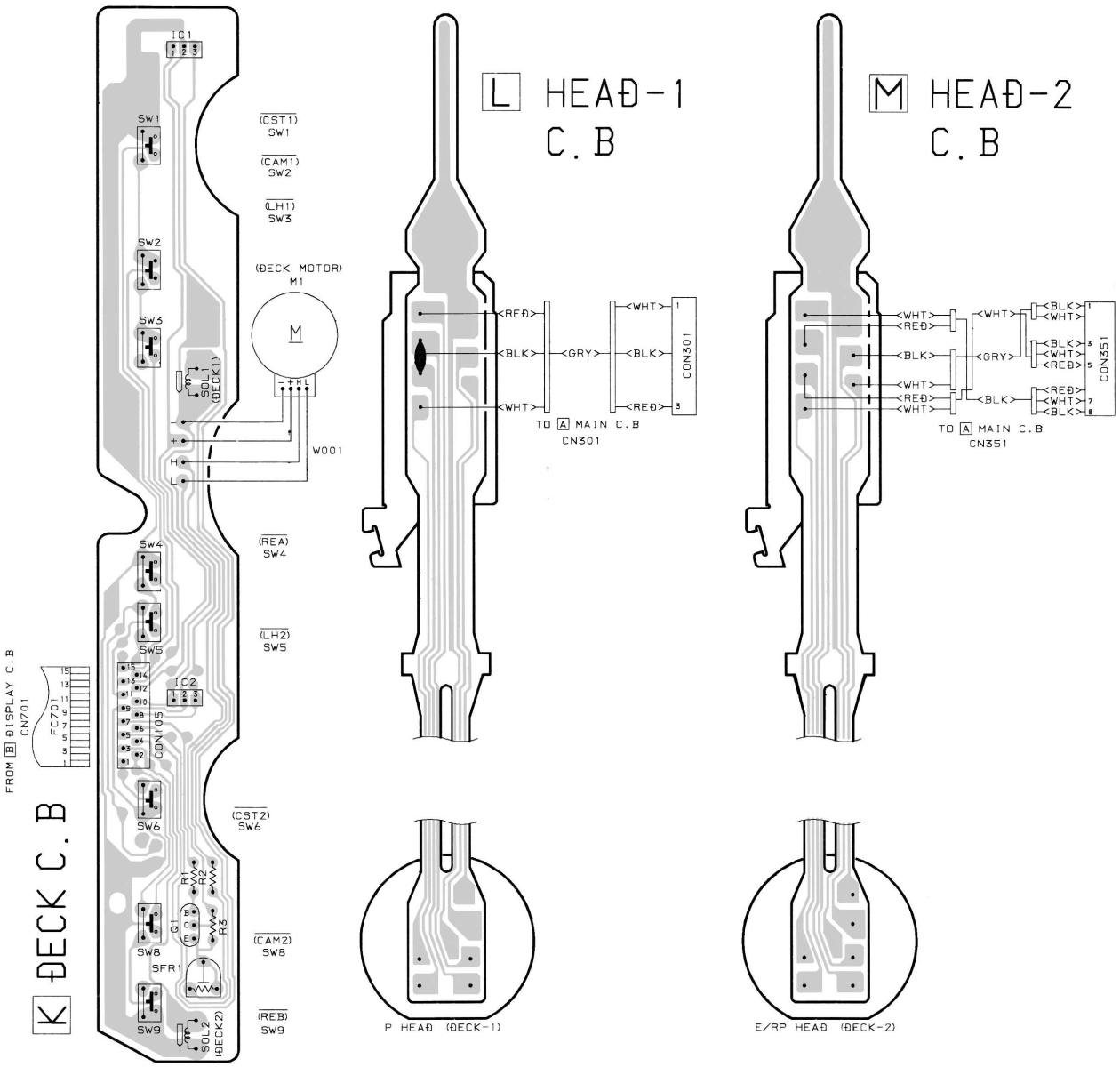
D029 D028 D019 D018 D027 D021 D011 D010 D020 D014 D024 D013 D023 D012 D026 D002 D003 D007 D005 D008 D009 D004 D006

R020 R018 R019 R003 R011 R002 R001 R012 R016 R017 R007 R009 R013 R014

C012 C013 C021 C034 C033 C020 C023 C019 C018 C031 C032 C022 C038 C036 C035 C037 C010 C029 C030 C009 C008 C027 C028 C016 C001

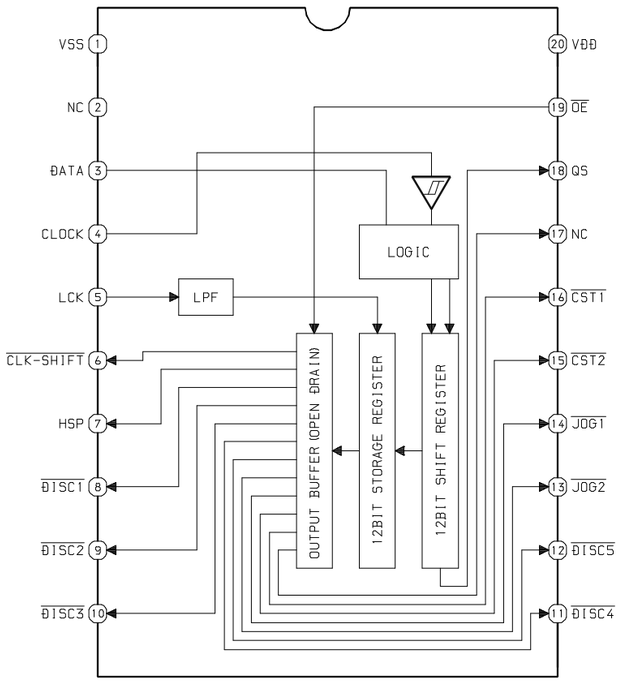
Q001 Q002 (B C E)


E PT C.B
CNA103
CN002
FROM D AMP C.B WH103
+VH
+VM
GNĐ
-VM
-VH
71.8
44.5
-44.5
-71.8
R020 47k
R019 47k
C023 3300/80
Đ003 GBU6JL 6131
C020 0.1
C033 0.1
C032 0.1
C031 0.1
C018 0.1
C019 0.1
C022 3300/80
C021 0.1
C034 0.1
Đ002 GBU4ĐL-6419
R001 47k
R002 47k
C010 0.1
C029 0.1
C012 3300/50
C013 3300/50
C009 0.1
C008 0.1
C028 0.1
C027 0.1
C011 0.1
C030 0.1
CNA001
FROM A MAIN C.B WH001
VS (AC1)
VS (AC2)
GNĐ
GNĐ
FIL1
FIL2
P-ON
VSTBY
RESET
11.2
CN001
PT001
ANF-3 (LH)
R009 27k
RY002
RELAY, AC12V-ALA2 PF12
Đ028 1SS133
Đ018 1SS133
Đ029 1SS133
Đ019 1SS133
Đ020 1SS133
Đ010 1SS133
Đ021 1SS133
Đ011 1SS133
Đ024 1SS133
Đ014 1SS133
Đ026 1SS133
Đ016 1SS133
R018 3.3k
R003 4.7k
R011 47k
R012 47k
Q001 ĐTC114 ES
RESET
R013 100
R014 33k
C001 470/25
Q002 KTC3199 GR
RESET
C016 3.3/50
Đ006 1SS133
Đ007 1SS133
Đ004 1SS133
Đ005 1SS133
Đ008 1SS133
Đ009 1SS133
PT002 ANF-8 KAMI
TF
120
110
0
RY002
S001
SW, SL1-2-3
SWS2301
AC VOLTAGE
F001 5A 250V
FC002
FC001
F002 5A 250V
FC004
FC003
-120V
220
230V
-240V
T002
T001
AC120V/220-230V/240V
50/60HZ

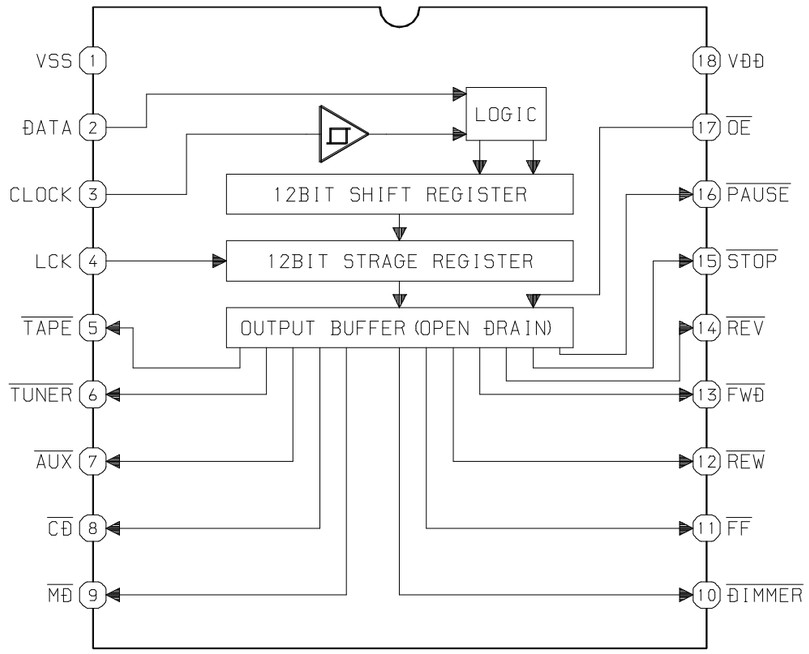

K DECK C.B
FROM B DISPLAY C.B
CN701
FC701
IC1
IC2
SW1
SW2
SW3
SW4
SW5
SW6
SW8
SW9
(CST1) SW1
(CAM1) SW2
(LH1) SW3
(DECK MOTOR) M1
SOL1 (DECK1)
W001
(REA) SW4
(LH2) SW5
CON105
(CST2) SW6
R1
R2
R3
Q1
SFR1
(CAM2) SW8
(REB) SW9
SOL2 (DECK2)
L HEAD-1 C.B
RED
BLK
GRY
WHT
CON301
TO A MAIN C.B CN301
P HEAD (DECK-1)
M HEAD-2 C.B
CN351
TO A MAIN C.B CN351
E/RP HEAD (DECK-2)

IC BLOCK DIAGRAM

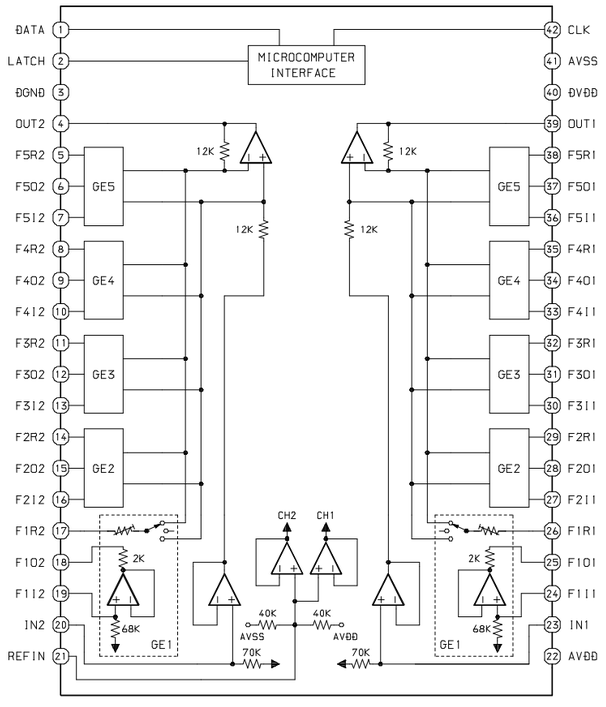
IC,BU2099FV



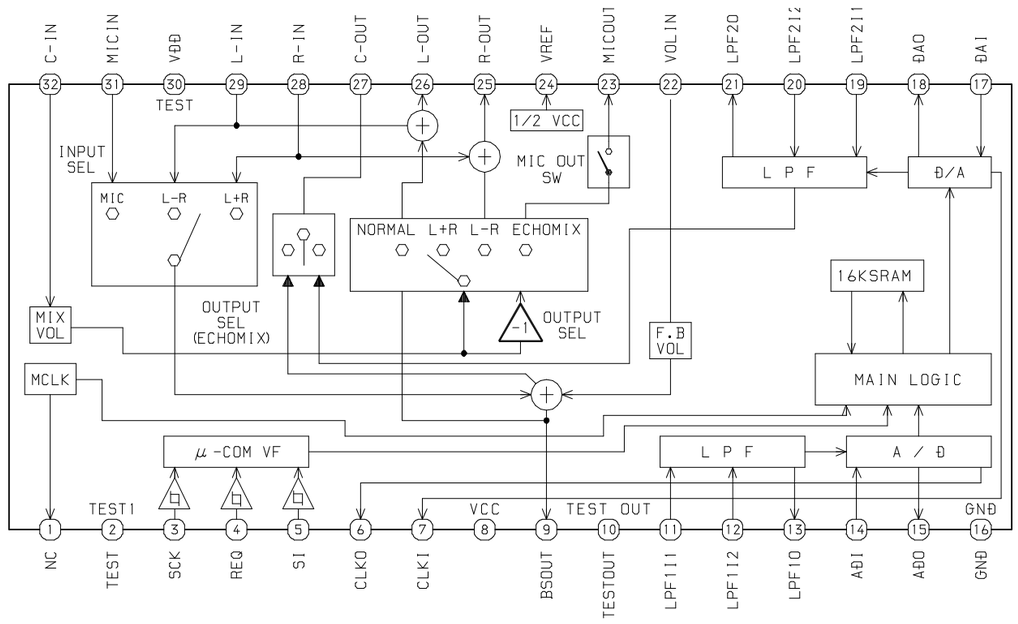
IC,BU2092F



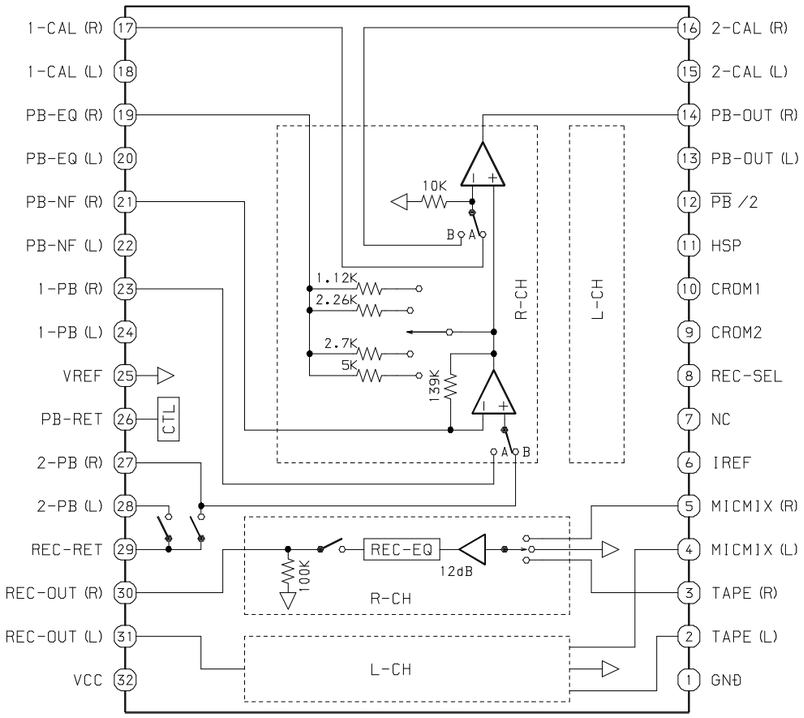
IC,M62449FP



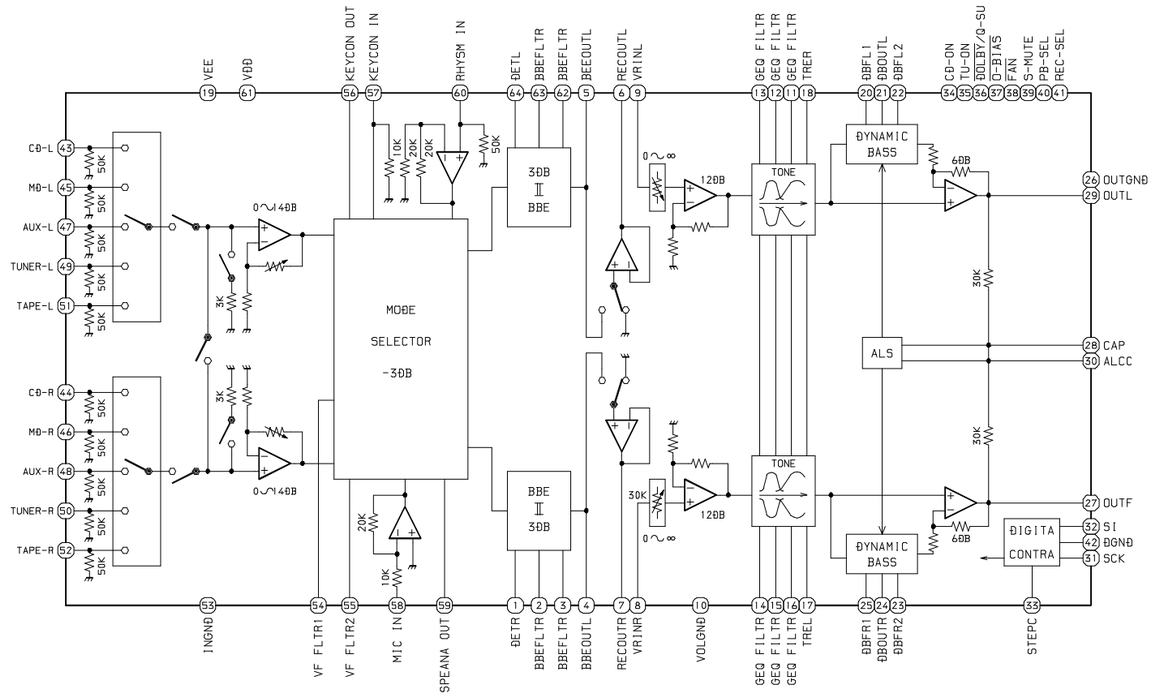
IC,M65849BFP631D



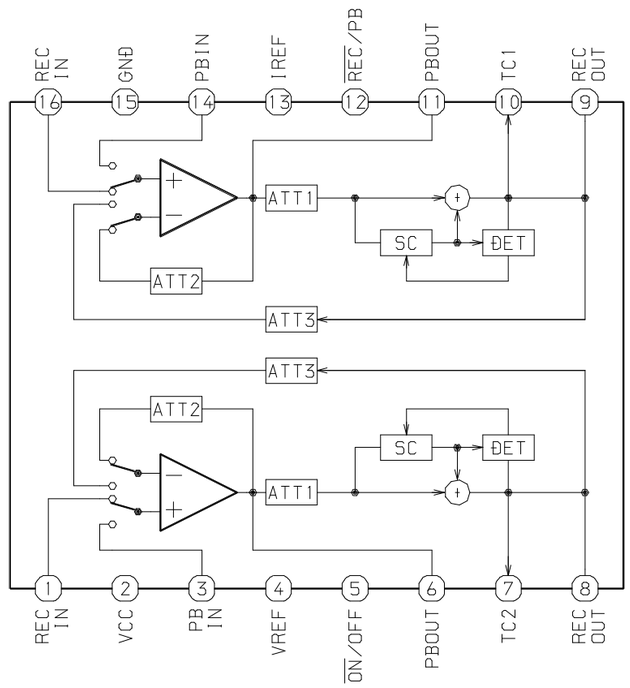
IC, BA7762AFS



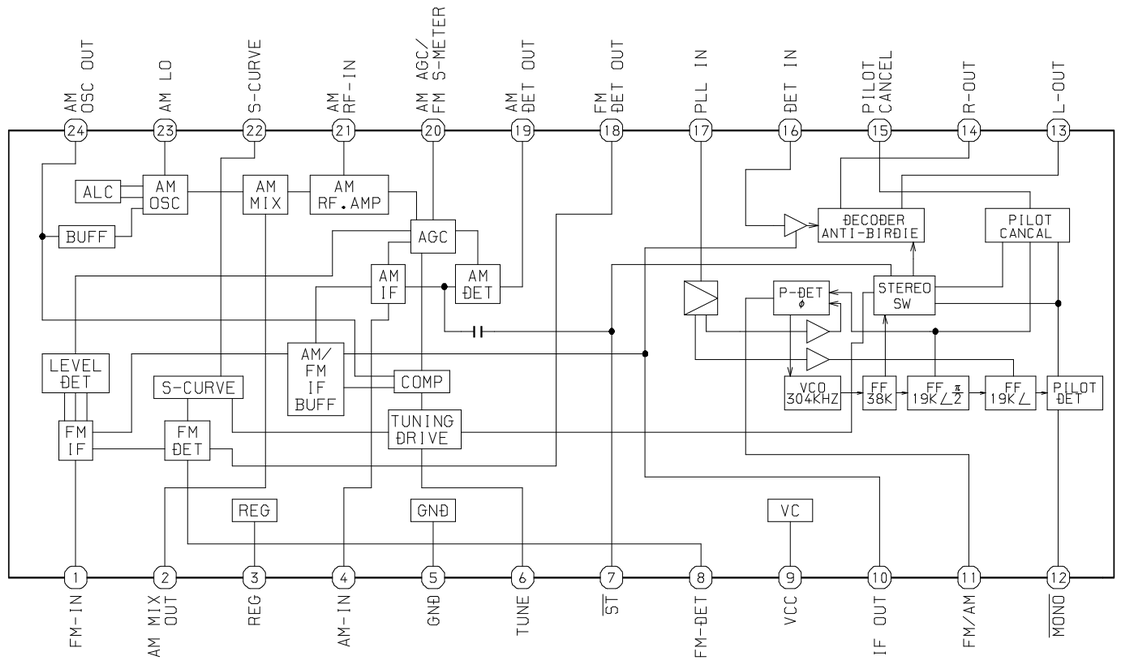
IC, BD3876KS2



IC, CXA1553P

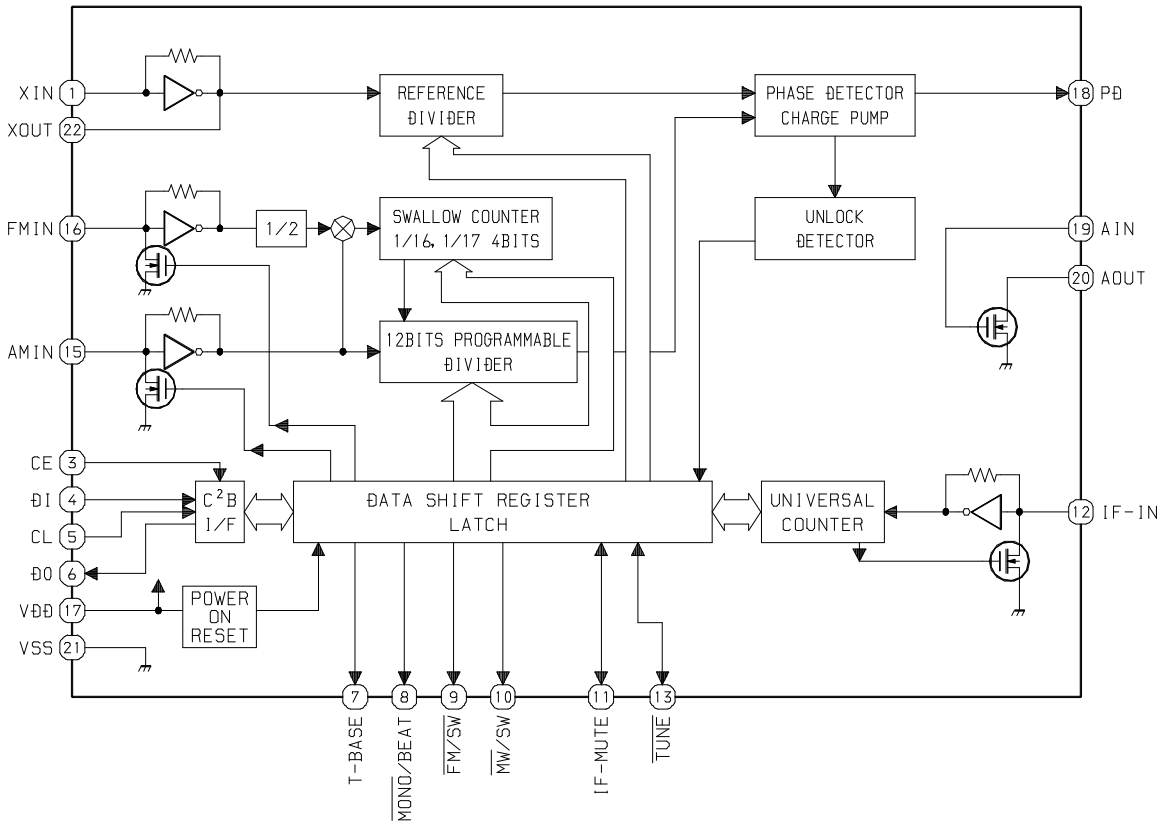


IC, LA1843

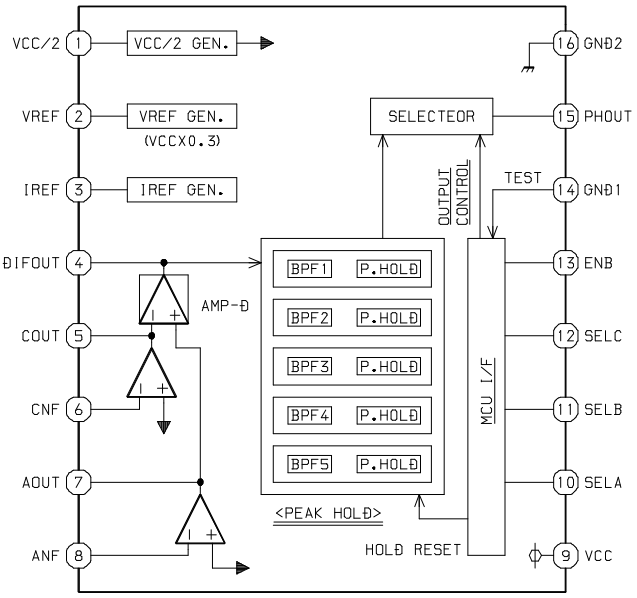


IC BLOCK DIAGRAM

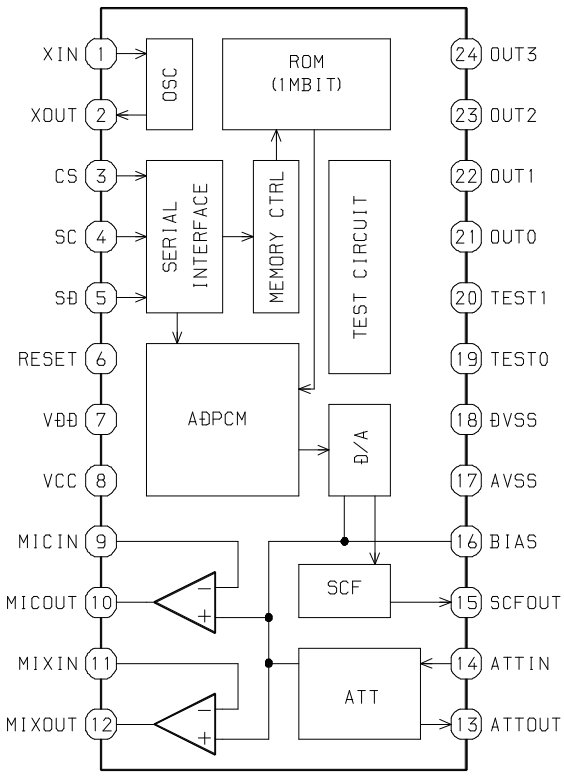
IC, LC72131D



IC, M61506FP

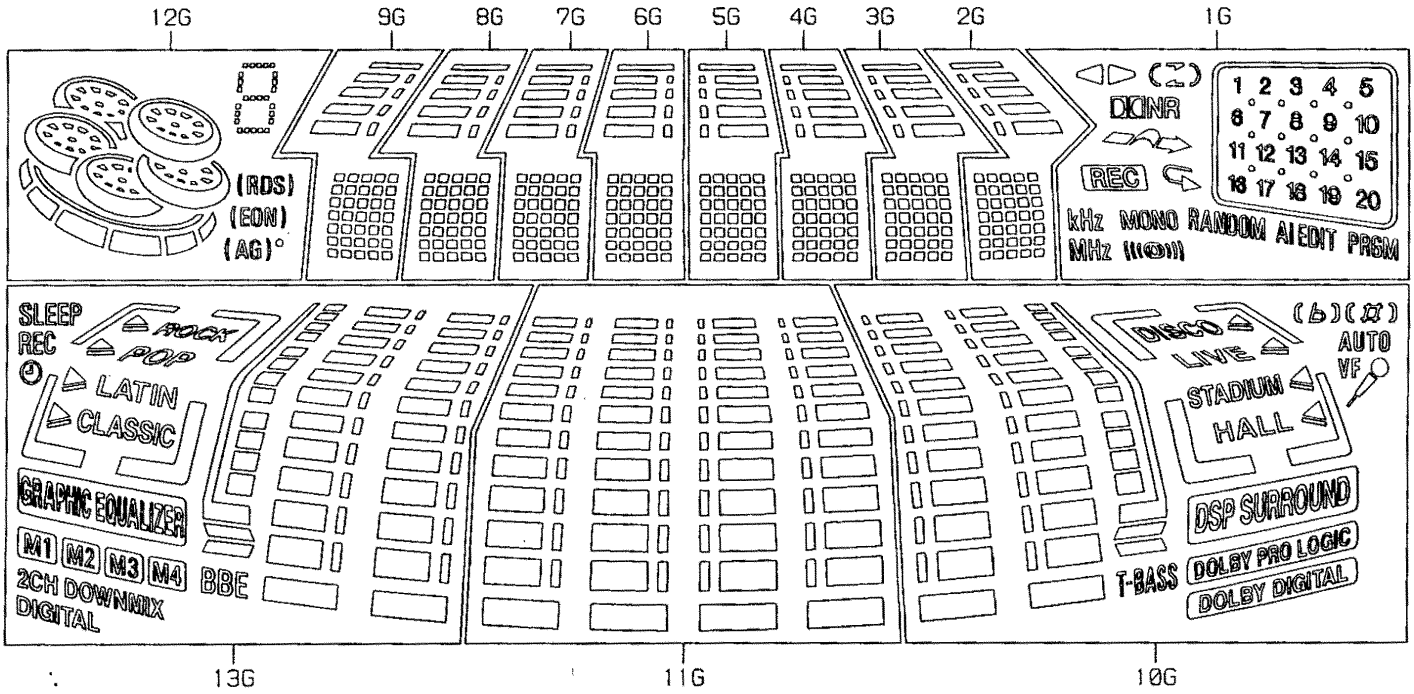


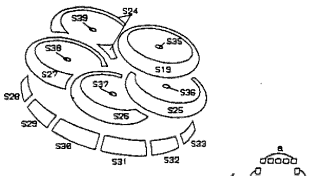
IC,BU9990-03FS

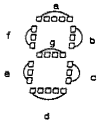


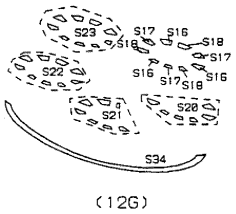
FL (BJ752GK-ANF3) GRID ASSIGNMENT AND ANODE CONNECTION

GRID ASSIGNMENT

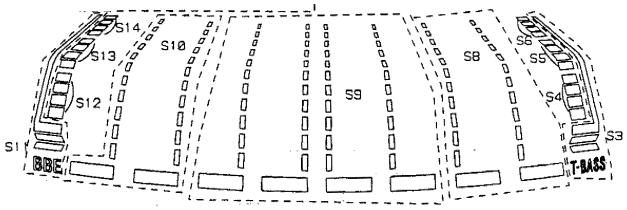


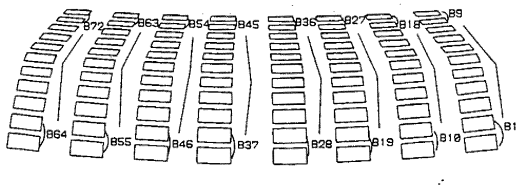




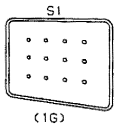


(12G)



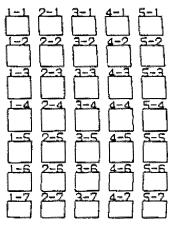


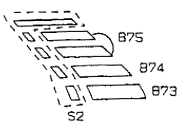
(13G,11G,10G)



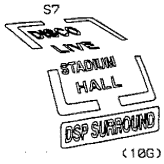
(1G)

(13G)





(9G~2G)



(10G)

ANODE CONNECTION

	13G	12G	11G	10G	9G~2G	1G
P1	S10	○	S9	S8	5-7	S1
P2	B72	( ) (AG)	B54	B18	4-7	PRGM
P3	B63	AG	B45	B9	3-7	AI
P4	B71	( ) (EON)	B36	B17	2-7	EDIT
P5	B62	EON	B27	B8	1-7	RANDOM
P6	B70	( ) (RDS)	B53	B16	5-6	((◎))
P7	B61	RDS	B44	B7	4-6	MONO
P8	B69	S33	B35	B15	3-6	MHz
P9	B60	S32	B26	B6	2-6	kHz
P10	B68	S31	B52	B14	1-6	)
P11	B59	S30	B43	B5	5-5	⇩
P12	B67	S29	B34	B13	4-5	(
P13	B58	S28	B25	B4	3-5	⇦
P14	B66	S34	B51	B12	2-5	⇔
P15	B57	S26	B42	B3	1-5	REC
P16	B65	S25	B33	B11	5-4	DIGNR
P17	B56	S20	B24	B2	4-4	▷
P18	B64	S36	B50	B10	3-4	◁
P19	B55	S21	B41	B1	2-4	1
P20	S14	S37	B32	S6	1-4	2
P21	S13	S27	B23	S5	5-3	3
P22	S12	S22	B49	S4	4-3	4
P23	S11	S38	B40	S3	3-3	5
P24	S15	S24	B31	S7	2-3	6
P25	(ROCK)	S23	B22	(DISCO)	1-3	7
P26	(POP)	S39	B48	(LIVE)	5-2	8
P27	(LATIN)	S19	B39	(STADIUM)	4-2	9
P28	(CLASSIC)	S35	B30	(HALL)	3-2	10
P29	SLEEP	S16	B21	( ) (b)	2-2	11
P30	REC	S17	B47	( ) (#)	1-2	12
P31	◴	S18	B38	♭ ✿	5-1	13
P32	M1	d	B29	AUTO	4-1	14
P33	M2	e	B20	TP	3-1	15
P34	M3	c	B46	DOLBY PRO LOGIC	2-1	16
P35	M4	g	B37	DOLBY DIGITAL	1-1	17
P36	2CH DOWNMIX	f	B28	–	B73	18
P37	DIGITAL	b	B19	–	B74	19
P38	–	a	–	–	B75	20
P39	–	–	–	–	S2	–

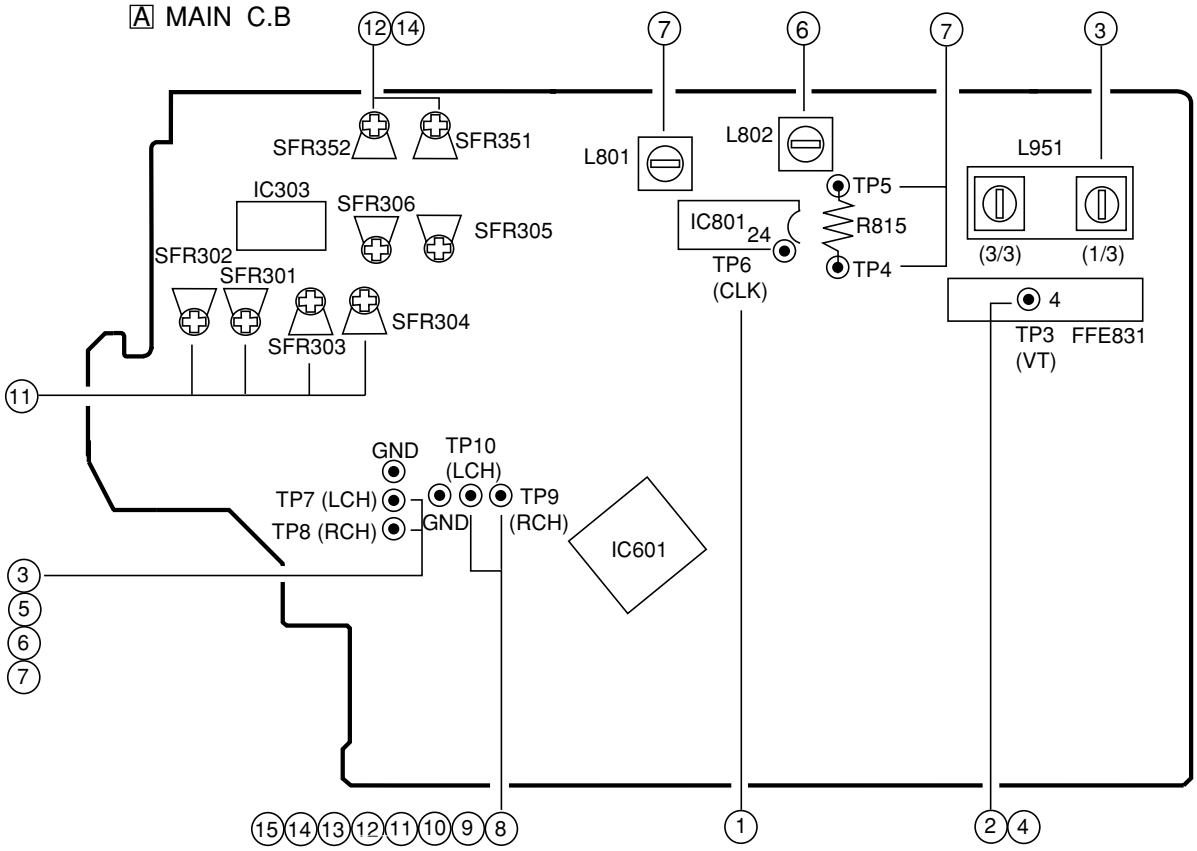
IC DESCRIPTION

IC, LC876596W-5P43

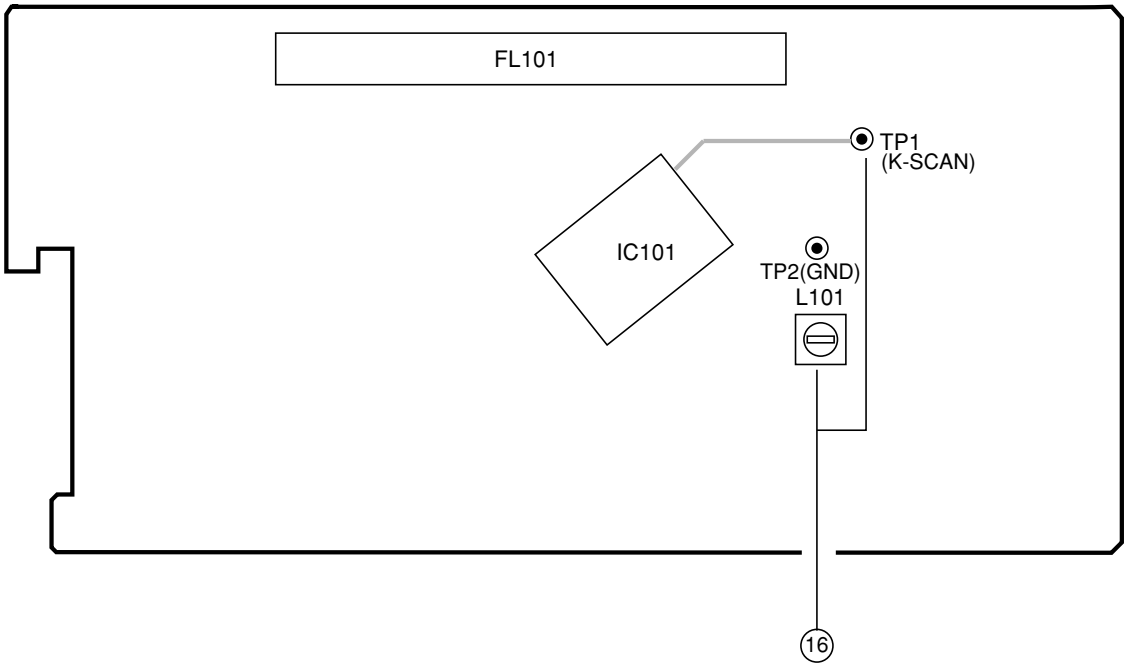
Pin No.	Pin Name	I/O	Description
1	CLK	O	Common serial CLOCK output.
2	DATA	O	Common Serial DATA output.
3	STB	O	Common serial STROBE output.
4	CS-RHYTHM	O	Rhythm IC chip select output.
5	GEQ-CE	O	GEQ IC chip enable output.
6	$\overline{\text{HP-MUTE}}$	I	Headphone plug-in detect input. (Output "L" at HOLD)
7	O-POWER	O	System power ON/$\overline{\text{OFF}}$ output. (Active "H")
8	PLL-CE	O	Tuner PLL IC chip enable output.
9	O-MUTE	O	System mute ON/$\overline{\text{OFF}}$ output.
10	I-MIC	I	Auto-VF MIC level special A/D input. (Output "L" at HOLD)
11	$\overline{\text{RESET}}$	I	Reset input.
12	VOL-JOG	I	Main volume JOG rotary encoder A/D input.
13	MULTI-JOG	I	MULTI JOG rotary encoder A/D input.
14	VSS1	–	Connected to GND.
15	CF 1	–	9.43MHz oscillator circuit.
16	CF2		
17	VDD1	–	Power supply.
18	$\overline{\text{HOLD}}$	I	Power supply voltage detect A/D input.
19 ~ 22	KEY 1 ~ 4	I	KEY 1 ~ 4 A/D input. (Output "L" at HOLD)
23	I-CDSW	I	CD mechanism SW A/D input. (Output "L" at HOLD)
24	I-DISH	I	CD turntable photo sensor A/D input. (Output "L" at HOLD)
25	I-SPEANA	I	SPEANA level A/D input. (Output "L" at HOLD)
26	I-RDSCLK/I-WRQ	I	TUNER RDS IC CLK input(not used) / CD WRQ input. (Output "L" at HOLD&INI)
27	I-TU-SIG/$\overline{\text{MS}}$	I	Tuner tuning signal level A/D input / Deck MS SENS. (Output "L" at HOLD)
28	I-TMBASE	I	Timebase clock (8Hz) input. (Output "L" at HOLD)
29	$\overline{\text{I-RMC}}$	I	Remote control signal input. Active: "L". (Output "L" at HOLD)
30 ~ 42	G13 ~ G1	O	FL grid G13 ~ G1 output.
43 ~ 45	P39 ~ P37	O	FL segment P39 ~ P37 output.
46	VDD3	–	Power supply.
47	P36/SPEANA A	O	FL segment P36 output / SPEANA band select output (A) .
48	P35/SPEANA B	O	FL segment P35 output / SPEANA band select output (B) .
49	P34/SPEANA C	O	FL segment P34 output / SPEANA band select output (C).
50	P33	O	FL segment P33 output.
51	VP	–	Power supply for FL.
52 ~ 59	P32 ~ P25	O	FL segment P32~ P25 output.
60	P24/NO AC-DEMO	I/O	FL segment P24 output / NO AC-DEMO at AC-IN diode input. (No store DEMO mode.)
61	P23/CASINO-DEMO	I/O	FL segment P23 output / CASINO-DEMO select diode input.
62	P22/NO-ECO	I/O	FL segment P22 output / NO-ECO select input.
63	P21/NO-RHYTHM	I/O	FL segment P21 output / NO-RHYTHM select diode input(not used).
64	P20/AC3-DPL	I/O	FL segment P20 output / AC3-DPL select diode input(not used).

Pin No.	Pin Name	I/O	Description
65	P19/K-CON	I/O	FL segement P19 output / K-CON select diode input(not used).
66	P18/RDS	I/O	FL segement P18 output / RDS select diode input(not used).
67	P17/FM1	I/O	FL segment P17 output / FM1 select diode input(not used).
68	P16/SW	I/O	FL segment P16 output / SW step initial diode input(not used).
69	P15/LW	I/O	FL segment P15output / LW stereo select diode input(not used).
70	P14/AM-10K	I/O	FL segment P14 output /AM-10K select diode input(not used).
71	P13/AM-ST	I/O	FL segment P13 output / AM-ST select diode input(not used).
72	VDD4	–	Power supply.
73~76	P12~P9	O	FL segment P12~P9 output.
77	P8/$\overline{\text{REA}}$	I/O	FL segment P8 ouput / REC enable (A) switch input (active: "L").
78	P7/$\overline{\text{CST1}}$	I/O	FL segment P7 output / Cassette (1) switch.
79	P6/$\overline{\text{CAM1}}$	I/O	FL segment P6 output / CAM (1) switch input (active: "L").
80	P5/AUTO2	I/O	FL segment P5 output / Auto stop reel (2) pulse input.
81	P4/AUTO1	I/O	FL segment P4 output / Auto stop reel (1) pulse input.
82	P3/$\overline{\text{CAM2}}$	I/O	FL segment P3 output / CAM (2) switch input. (active:"L").
83	P2/$\overline{\text{REB}}$	I/O	FL segment P2 output / REC enable (B) switch input. (active:"L").
84	P1/$\overline{\text{CST2}}$	I/O	FL segment P1 output / Cassette (2) switch input. (active:"L").
85	$\overline{\text{K-SCAN}}$	O	Key scan output. (active:"L").
86	$\overline{\text{SOL1}}$	O	DECK (1) solenoid $\overline{\text{ON}}$/OFF output.
87	$\overline{\text{SOL2}}$	O	DECK (2) solenoid $\overline{\text{ON}}$/OFF output.
88	$\overline{\text{O-MOTOR}}$	O	Deck motor $\overline{\text{ON}}$/OFF output .
89	VSS2	–	Connected to GND.
90	VDD2	–	Power supply.
91	O–DISHREV	O	CD turn table dish reverse output.
92	O-DISHFWD	O	CD turn table dish forward output.
93	O-OPEN	O	CD tray open output.
94	O-CLOSE	O	CD tray close output.
95	IFC-$\overline{\text{TU}}$/I-SQDATA	I	Tuner tune/IF count input (active: "L") / CD SUB-Q data input.
96	$\overline{\text{I-STEREO}}$/I-DRF (O-CLK-VCD)	I/O	Tuner stereo detect input (active "L") / DRF input.
97	O-DATA(CD)/ I-RDS DATA	I/O	CD IC control data output / Tuner RDS data input(not used).
98	CD-CE/ IO BUSY (VCD)	I/O	CD chip enable output.
99	CLK (CD)	O	CD IC control clock output.
100	STB(SHIFT)	O	Shift register strobe output.

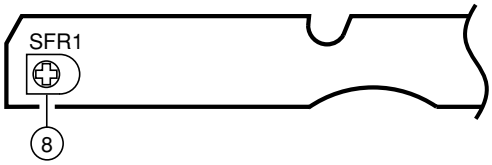
Ⓐ MAIN C.B



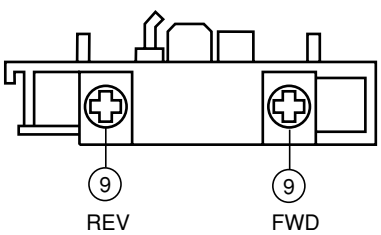
Ⓑ DISPLAY C.B



Ⓚ DECK C.B



DECK-1 P,DECK-2 R/P/E HEAD



< TUNER SECTION >

1. Clock Frequency Check
   Settings : • Test point : TP6 (CLK)
   Method : Set to AM 1710kHz and check that the test point is 2160kHz ± 45Hz.

2. AM VT Check
   Settings : • Test point : TP3 (VT)
   Method : Set to AM 1710kHz and AM 530kHz and check that the test point is less than 8.5V(1710kHz) and more than 0.6V(530kHz)

3. AM Tracking Adjustment
   Settings : • Test point : TP7(Lch), TP8(Rch)
   • Adjustment location :
   L951(1/3)..... 999kHz
   Method : Set to AM 999kHz and adjust L951(1/3) so that the test point is max.

4. FM VT Check
   Settings : • Test point : TP3 (VT)
   Method : Set to FM 108.0MHz and check that the test point is less than 8.0V.
   Set to FM 87.5MHz and check that the test point is more than 0.5V.

5. FM Tracking Check
   Settings : • Test point : TP7(Lch), TP8(Rch)
   Method : Set to FM 98.0MHz and check that the test point is less than 9.0dBμV.

6. AM IF Adjustment
   Settings : • Test point : TP7(Lch), TP8(Rch)
   • Adjustment location : L802
   • Input level : Variable
   Method : Adjust L802 so that the output becomes max.

7. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP4, TP5 (DC Balance)
   TP7(Lch), TP8(Rch) (Distortion)
   • Adjustment location : L801
   • Input level : 60dBμV
   Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP4 and TP5 becomes 0V ± 0.04V.
   Next, check that the distortion is less than 1.3%

< DECK SECTION >

8. Tape Speed Adjustment (DECK 1, DECK 2)
   Settings : • Test tape : TTA–100(3kHz)
   • Test point : TP9(Rch), TP10(Lch)
   • Adjustment location : SFR1
   Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz(FWD) and ± 45Hz(REV) with respect to forward speed.

9. Head Azimuth Adjustment (DECK 1, DECK 2)
   Settings : • Test tape : TTA–300 (315/10kHz)
   • Test point : TP9(Rch), TP10(Lch)
   • Adjustment location : Head azimuth adjustment screw
   Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

10. PB Frequency Response Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–300 (315/10kHz)
    • Test point : TP9(Rch), TP10(Lch)
    Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is within 0 ± 2dB.

11. PB Sensitivity Adjustment (DECK 1, DECK 2)
    Settings : • Test tape : TTA–200 (400Hz)
    • Test point : TP9(Rch), TP10(Lch)
    • Adjustment location :
    SFR301 (DECK 1, Lch)
    SFR302 (DECK 1, Rch)
    SFR303 (DECK 2, Lch)
    SFR304 (DECK 2, Rch)
    Method : Play back the test tape and adjust SFRs so that the output level of the test points become 245mV±10mV.

12. REC/PB Frequency Response Adjustment (DECK 2)
    Settings : • Test tape : TTA–602 (Normal)
    • Test point : TP9(Rch), TP10(Lch)
    • Input signal : 1kHz / 10kHz (LINE IN)
    • Adjustment location :
    SFR351 (Lch)
    SFR352 (Rch)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the test points becomes 12.5mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output level of the 10kHz signals becomes 0dB ± 0.5dB with respect to that of the 1kHz signal.

13. REC/PB Frequency response Check (DECK 2)
    Settings : • Test tape : TTA-615 (CrO_2)
    • Test point : TP9(Rch), TP10(Lch)
    • Input signal : 1kHz/10kHz (LINE IN)
    Method : Apply a 1kHz signal and REC mode. Then Adjust OSC attenuator so that the output level at the test points becomes 12.5mV. Record and play back the 1kHz and 10kHz signals and check that the output is 0dB ± 2dB.

14. REC/PB Sensitivity Adjustment (DECK 2)

Settings : • Test tape : TTA–602 (Normal)
• Test point : TP9(Rch), TP10(Lch)
• Input signal : 1kHz (LINE IN)
• Adjustment location :
SFR305 (Lch)
SFR306 (Rch)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the test points becomes 125mV. Record the play back the 1kHz signal and adjust SFRs so that the output level becomes 0dB ± 0.5dB.

15. REC/PB Sensitivity Check (DECK 2)

Settings : • Test tape : TTA-615 (CrO_2)
• Test point : TP9(Rch), TP10(Lch)
• Input signal : 1kHz (LINE IN)

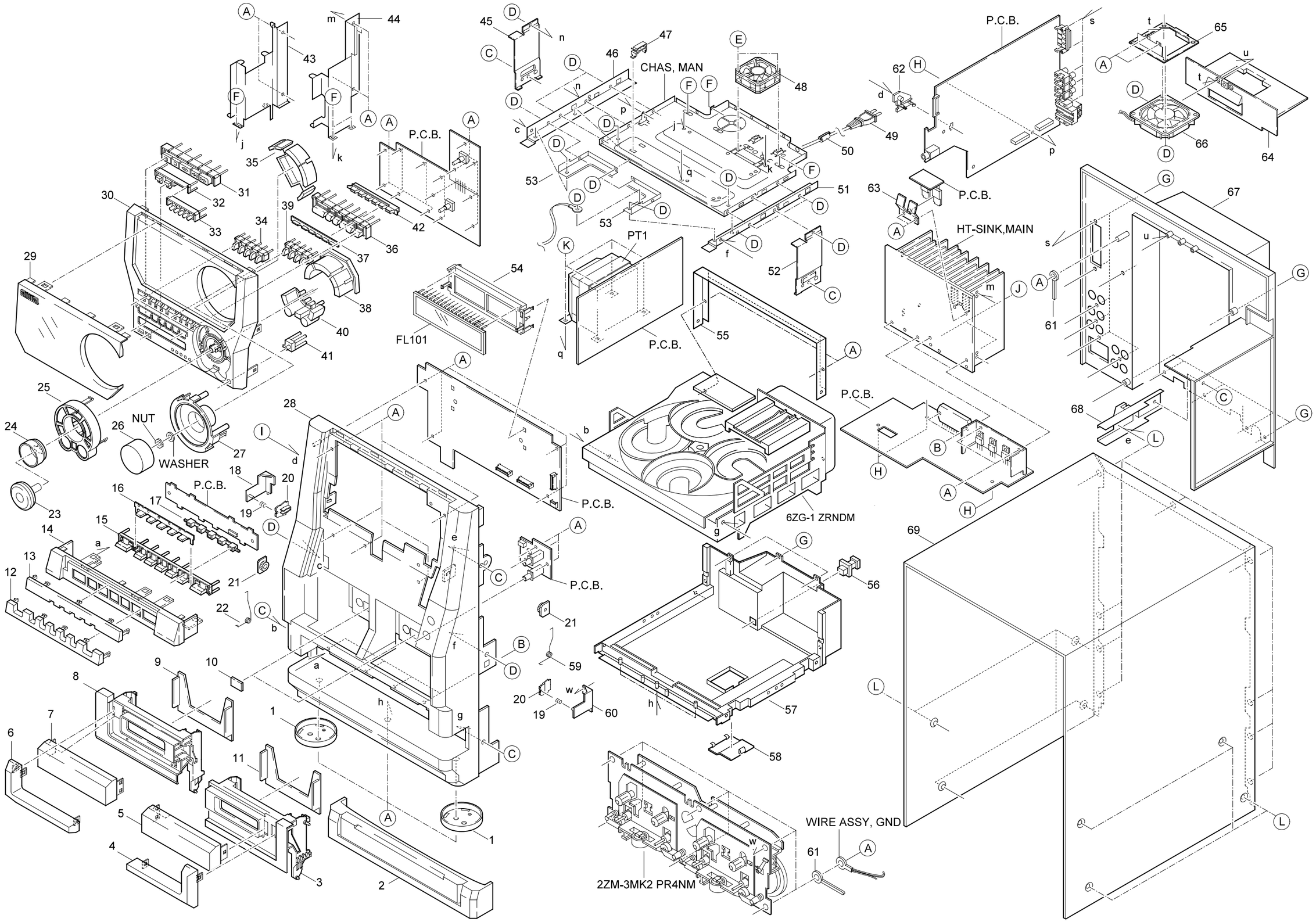
Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the test points becomes 125mV. Record and play back the 1kHz signal and check that the output is 0dB ± 1.5dB.

16. µ-CON OSC Adjustment

Settings : • Test point : TP1
• Adjustment location : L101

Method : Insert AC plug with pressing TUNER function key. Adjust L101 so that the frequency across the test point is 208.8Hz ± 0.2Hz.

MECHANICAL EXPLODED VIEW 1 / 1



MECHANICAL PARTS LIST 1 / 1

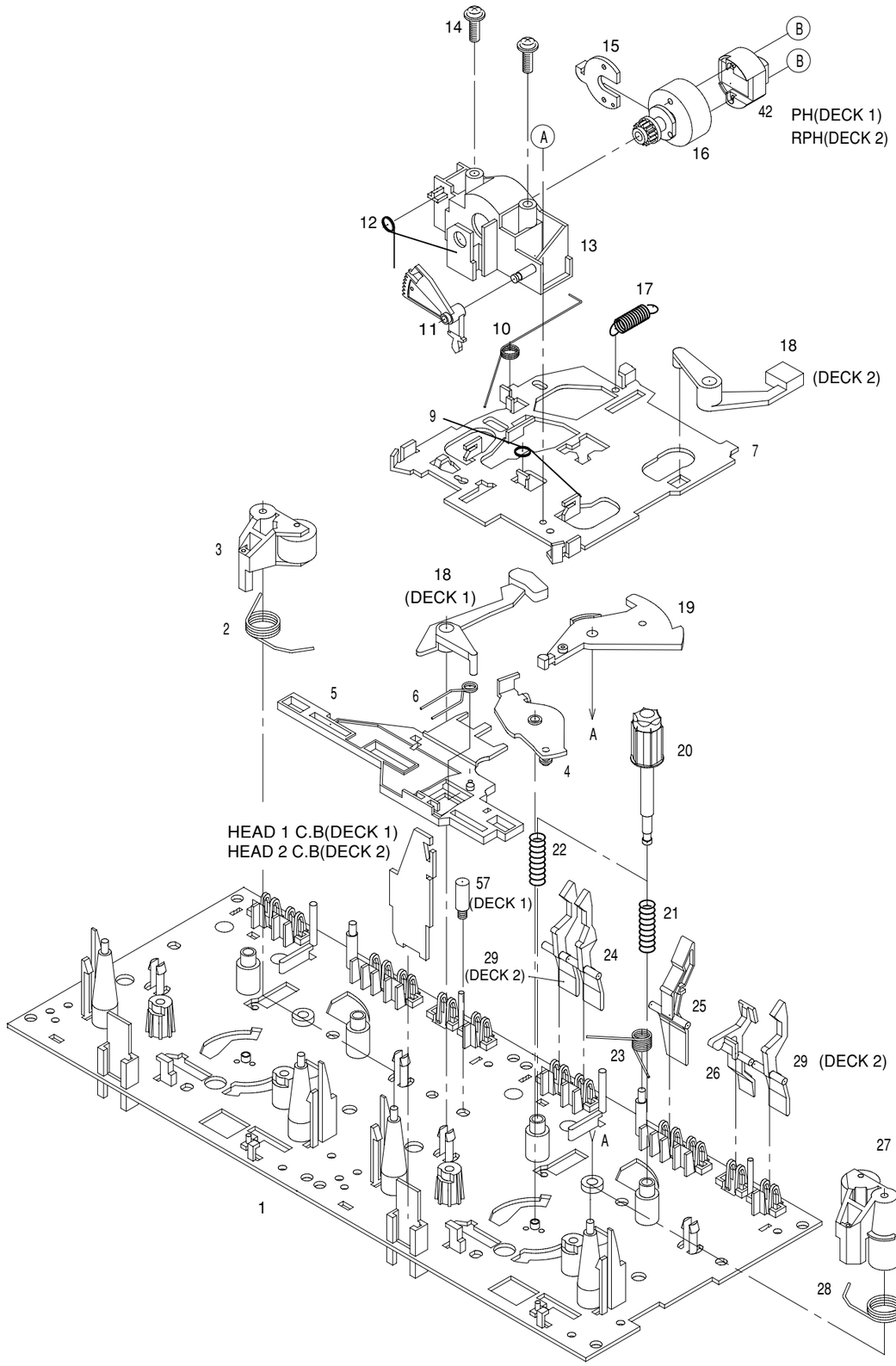
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-NF3-090-010		RING,FOOT
2	8A-NF3-042-010		PANEL ASSY,TRAY
3	8A-NF3-029-010		BOX,CASS R
4	8A-NF3-040-010		PANEL,CASS R
5	8A-NF3-059-010		WINDOW,CASS R
6	8A-NF3-039-010		PANEL,CASS L
7	8A-NF3-058-010		WINDOW,CASS L
8	8A-NF3-028-010		BOX,CASS L
9	8A-NF3-090-010		REFLECTOR,CASS L
10	81-532-080-010		LABEL, CASS. COMPT
11	8A-NF3-091-010		REFLECTOR,CASS R
12	8A-NF3-048-010		PANEL,REFLECTOR- CD
13	8A-NF3-049-010		PANEL,KEY-CD
14	8A-NF3-047-010		PANEL,CD
15	8A-NF3-071-010		KEY,CD
16	8A-NF3-089-010		REFLECTOR,CD
17	8A-NF3-203-010		GUIDE,LED-CD
18	87-NF4-216-010		HLDR,LOCK 1
19	86-NF9-224-010		SPR-C,LOCK
20	82-NF5-229-010		PLATE,LOCK
21	87-NF8-220-010		DMPR,150
22	82-NF5-218-010		SPR-T,EJECT 1 (SIN)
23	8A-NF3-082-010		KNOB,RTRY JOG
24	8A-NF3-087-010		REFLECTOR,JOG
25	8A-NF3-077-010		RING,JOG H
26	8A-NF3-081-010		KNOB,RTRY VOL
27	8A-NF3-076-010		RING,VOL
28	8A-NF3-001-010		CABI,FR
29	8A-NF4-051-010		WINDOW,DISP
30	8A-NF3-034-010		PANEL,FR LH
31	8A-NF3-063-010		KEY ASSY,OPE
32	8A-NF3-073-010		KEY,REC U
33	8A-NF3-065-010		KEY,KARAOKE
34	8A-NF3-061-010		KEY,GEQ
35	8A-NF3-067-010		KEY,BBE
36	8A-NF3-072-010		KEY,FUNC
37	8A-NF3-088-010		REFLECTOR,FUNC
38	8A-NF3-068-010		KEY,JOG
39	8A-NF3-062-010		KEY,DSP
40	8A-NF3-069-010		KEY,SPICE
41	8A-NF3-070-010		KEY,ECO
42	8A-NF3-201-010		GUIDE,LED-FUNC
43	8A-NF3-213-010		HLDR,HT-SINK L
44	8A-NF3-214-010		HLDR,HT-SINK R
45	8A-NF3-210-010		HLDR,SIDE L

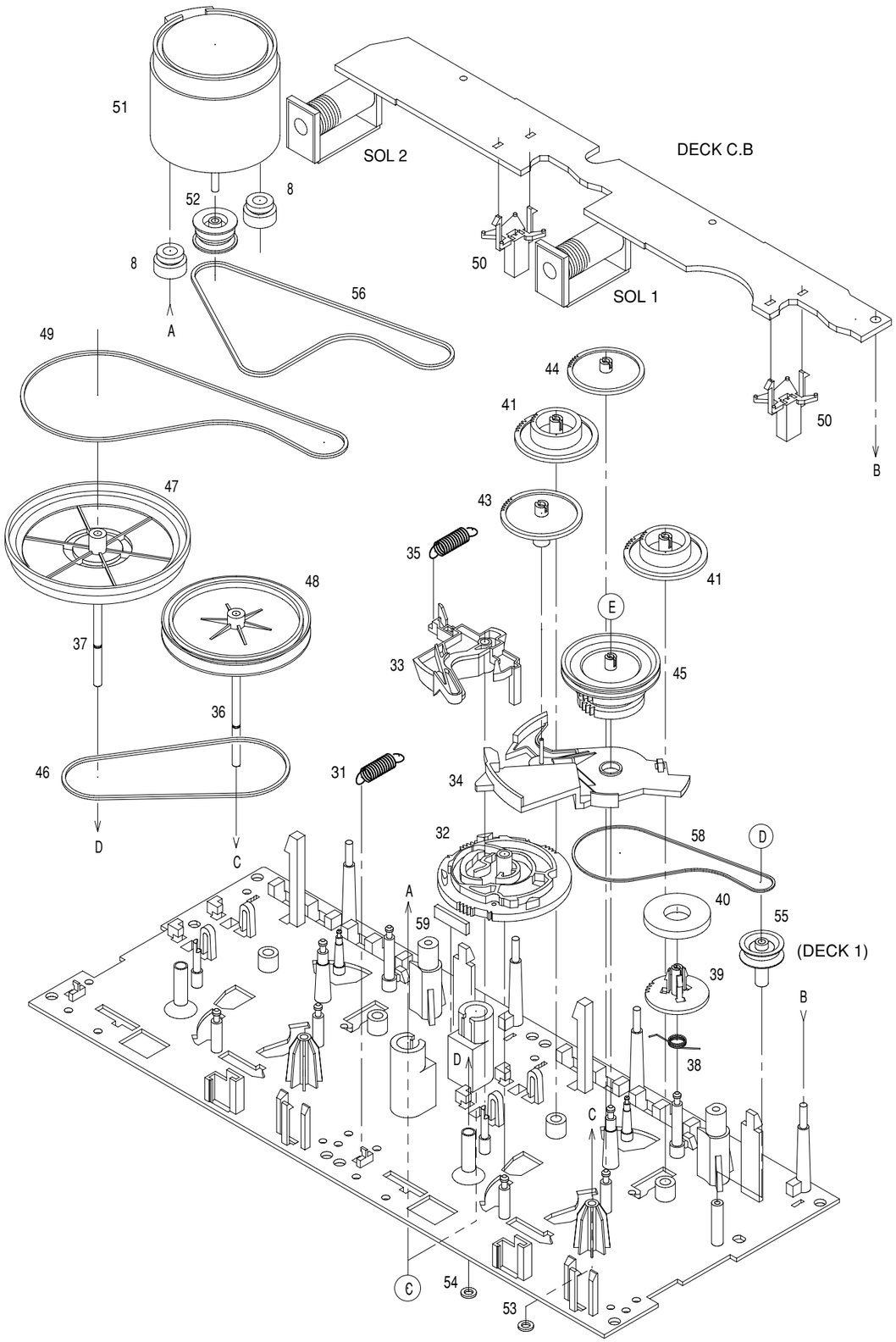
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
46	8A-NF3-208-010		HLDR,CHAS L
47	87-NF4-221-010		HLDR,CABLE
48	87-A91-423-010		FAN,AD0612DS-D70GL
⚠ 49	87-A80-148-010		AC CORD ASSY,E BLK
50	87-085-185-010		BUSHING, AC CORD (E)
51	8A-NF3-209-010		HLDR,CHAS R
52	8A-NF3-211-010		HLDR,SIDE R
53	8A-NF3-229-010		HLDR,BRACKET
54	8Z-NF3-210-010		GUIDE,FL
55	8A-NF3-212-010		HLDR,REAR
56	84-ZG1-245-210		CAP,OPTICAL
57	8A-NF3-026-010		CABI,BOTTOM
58	8Z-NF3-048-010		COVER, BOTTOM
59	82-NF5-219-010		SPR-T,EJECT 2 (SIN)
60	87-NF4-217-110		HLDR,LOCK 2
61	87-064-185-010		HLDR,WIRE
62	8A-NF8-206-010		HLDR,PWB M
63	8A-NF3-221-010		HLDR,IC-VM
64	8A-NF3-225-010		COVER, HLDR
65	8A-NF3-223-010		HLDR,FAN
66	87-A91-711-010		FAN, 3110GL-B4W-B34-H02 -400MM
67	8A-NF4-011-010		CABI,REAR LHSM
68	8A-NF3-228-010		HLDR,PWB-PT
69	8A-NF3-027-010		CABI,STEEL
A	87-067-703-010		TAPPING SCREW, BVT2+3-10
B	87-067-581-010		S-SCREW,BVT2+3-15 W/O SLOT
C	87-721-097-410		QT2+3-12 GLD
D	87-591-095-410		TAPPING SCREW, QIT+3-8 (GLD)
E	87-067-822-010		BVT2+3-20 W/O SLOT
F	87-067-689-010		TAPPING SCREW, BVTT+3-8
G	87-067-761-010		S-SCREW,BVT2+3-10 BLK
H	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
I	87-721-096-010		QT2+3-10 W/O SLOT
J	87-067-758-010		S-SCREW,BVT2+3-12 W/O SLOT
K	87-067-975-010		S-SCREW,IT+4-8
L	87-067-641-010		UTT2+3-8(W/O SLOT)BL

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

TAPE MECHANISM EXPLODED VIEW 1 / 1





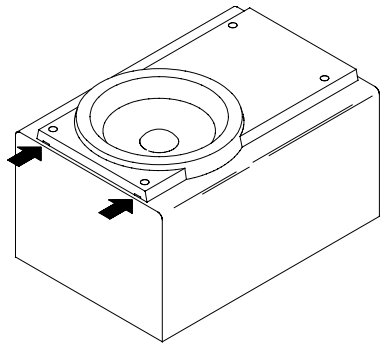
TAPE MECHANISM PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-510		CHAS ASSY,M2
2	82-ZM1-258-110		SPR-T,PINCH L
3	82-ZM1-341-110		LVR ASSY,PINCH L2
4	82-ZM1-333-010		PLATE,LINK 2
5	82-ZM1-266-11K		LVR,DIR
6	82-ZM1-214-010		SPR-T,DIR
7	82-ZM1-206-81K		CHAS,HEAD
8	82-ZM3-340-010		SH,BELT D2
9	82-ZM1-269-210		SPR-T,BRG
10	82-ZM1-219-110		SPR-T,LINK
11	82-ZM1-210-110		GEAR,H T
12	82-ZM1-213-010		SPR-T,HEAD
13	82-ZM1-207-610		GUIDE,TAPE
14	86-ZM4-206-010		S-SCREW,AZIMUTH
15	82-ZM1-314-110		PLATE,HEAD
16	82-ZM1-208-110		HLDR,HEAD
17	82-ZM1-218-010		SPR-E,HB
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)
19	82-ZM1-222-21K		LVR,PLAY
20	82-ZM1-217-310		REEL TABLE
21	82-ZM1-244-510		SPR-C,BT
22	82-ZM1-285-310		SPR-C,BT L
23	82-ZM1-257-010		SPR-T,CAS
24	82-ZM1-241-310		LVR,MC
25	82-ZM1-242-010		LVR,CAS
26	82-ZM1-243-010		LVR,STOP
27	82-ZM1-344-110		LVR ASSY,PINCH R2
28	82-ZM1-259-110		SPR-T,PINCH R
29	82-ZM1-240-11K		LVR,REC (DECK 2)
31	82-ZM1-255-310		SPR-E,LVR DIR
32	82-ZM3-305-01K		GEAR,CAM M2
33	82-ZM1-227-21K		LVR,TRIG
34	82-ZM3-306-11K		LVR,FR M2
35	82-ZM1-265-110		SPR-E,TRIG
36	82-ZM3-339-010		SHAFT,COUPLER N3(DECK 1)
37	86-ZM1-206-010		BELT,MAIN L
38	82-ZM1-322-010		SPR-T,FR60
39	82-ZM1-220-210		GEAR,IDLER
40	82-ZM3-616-010		RING MAGNET 4
41	82-ZM1-216-31K		GEAR,REEL
42	87-A90-319-010		HEAD,PH HADKH2 FPC
42	87-A90-320-010		HEAD,RPH HADKH5 FPC
43	82-ZM1-225-21K		GEAR,FR
44	82-ZM1-226-010		GEAR,REW
45	82-ZM3-333-310		SLIP DISK ASSY 2
46	82-ZM1-338-010		BELT FR4
47	82-ZM1-349-110		FLY-WHL,R W(DECK 2)
47	82-ZM3-338-110		FLY-WHL,R3 W(DECK 1)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 2)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 1)
49	82-ZM3-329-210		BELT,SBU R2
50	82-ZM1-245-210		HLDR,IC
51	87-045-347-019		MOT,SHU2L 70(M1)
52	82-ZM3-221-010		PULLEY,MOT 2M
53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
55	82-ZM3-335-210		PULLEY,COUPLER M3(DECK 1)
56	82-ZM3-337-010		BELT,SBU MOT 2
57	82-ZM3-339-010		SHAFT,COUPLER N3(DECK 1)
58	86-ZM1-206-010		BELT,MAIN L
59	82-ZM3-340-010		SH,BELT D2
A	85-ZM3-202-010		S-SCREW,TG
B	80-ZM6-207-019		V+1.6-7
C	82-ZM3-318-019		S-SCRW MOTOR M2
D	87-B10-043-010		W-P,0.99-4-0.25 SLT
E	82-ZM3-334-010		PW,2.16-6-0.4

SPEAKER DISASSEMBLY INSTRUCTIONS

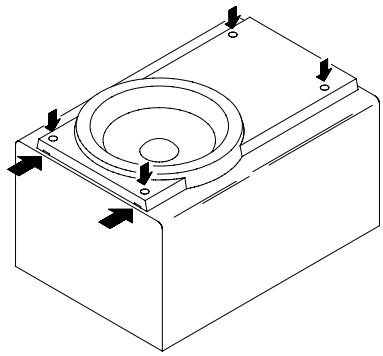
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



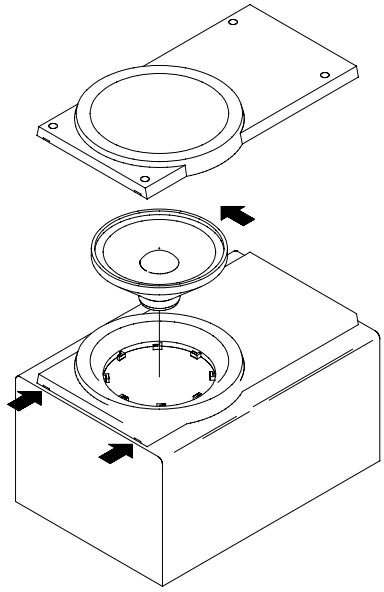
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

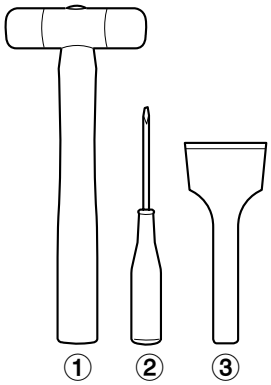


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

① Plastic head hammer
② (⊖) flat head screwdriver
③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

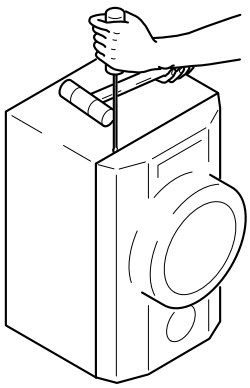


Fig-1

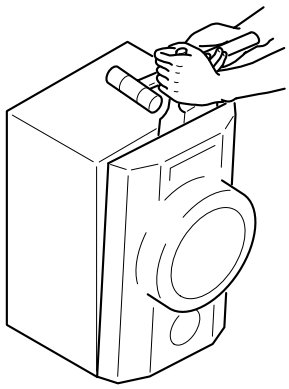


Fig-2

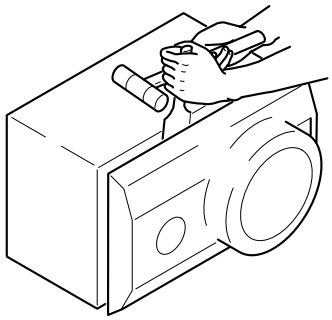


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST SX-WNT98 (YLSL)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NS3-001-010		PANEL,FR
2	8A-NS3-002-010		PANEL,TW L
3	8A-NS3-003-010		PANEL,TW R
4	8A-NS3-006-010		PANEL,TOP
5	8A-NS3-009-010		ADAPTOR
6	8A-NS3-011-010		PROTECTOR,TWA
7	8A-MS3-602-110		SPKR,W 200
8	8A-NS3-602-010		SPKR,M 100
9	8A-MS2-605-110		SPKR,TW 60
10	88-NSK-610-010		SPKR,CERAMIC ASSY
11	88-NS5-610-010		CORD,SPKR
12	88-NS5-611-010		CORD,SPKR B/L
13	8A-NSJ-006-010		BADGE,AIWA S35
14	8A-NS3-014-010		CABI,TOP
16	8A-NS3-004-010		PANEL,DUCT RING
17	8A-NS3-005-010		PANEL,DUCT
18	8A-NS3-015-010		PANEL,DUCT SA
19	8A-NS3-010-010		PROTECTOR,SQA
20	8A-NS3-017-010		PANEL,RING S

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AIWA CO.,LTD. 2-11, IKENOHATA 1-CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111

9820572 9630472 0251431 Printed in Singapore